

Sunrise Telecom Incorporated

2001

Annual Report

APR - 8 2012

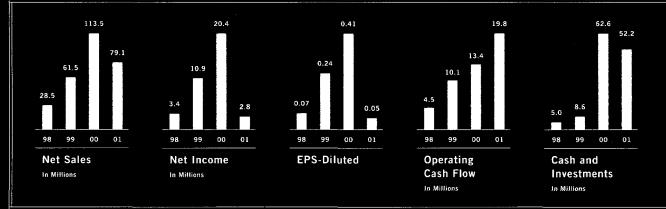
Broadband-Access Test Solutions

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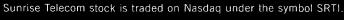
INRISE TELEC

Financial Highlights

(Dollars in Thousands, Except per Share Amounts)	2001	2000	1999	1998
Income Statement Data				
Net sales	\$ 79,059	\$ 113,481	\$ 61,465	\$28,535
Gross profit	53,550	80,487	46,729	20,945
Income from operations	952	30,448	16,908	4,735
Net income	2,817	20,385	10,944	3,371
EPS difuted	0.05	0.41	0.24	0.07
Balance Sheet Data				
Cash and cash equivalents	\$ 48,713	\$ 56,298	\$ 8,615	\$ 5,030
Working capital	64,862	81,967	16,029	10,164
Total assets	126,621	125,556	38,266	17,193
Notes payable, less current portion	1,065	1,047	638	
Total stockholders' equity	111,753	105,644	25,471	13,570



About Sunrise Sunrise Telecom manufactures and markets service verification equipment to pre-qualify, verify, and diagnose telecommunications, cable TV, and Internet networks. Our products offer broad functionality, leading-edge technology, and compact size to test a variety of new broadband services—from wireline access, including DSL, fiber optics, cable TV and signaling networks. Our products are designed to maximize technicians' effectiveness in the field and to provide realistic network simulations that enable equipment manufacturers to test their products. We were founded in 1991 and are based in San Jose, California. We distribute our products through a network of sales representatives, distributors, and a direct sales force throughout six continents.













Investing for the Broadband Future

LETTER TO SHAREHOLDERS Excess network capacity, a severe industry downturn, and a corresponding drop in capital spending made 2001 a turbulent and challenging year for the telecommunications industry and for Sunrise Telecom.

With more than 10 years of sound fiscal management, we took early and measured actions in 2001 to balance our business fundamentals with the market's deteriorating conditions. Despite a tough year, we are pleased to have operated profitably with broad revenue contributions across our market sectors. We have the financial strength and fiscal discipline to manage our business through this cycle and to continue to provide innovative solutions for our customers.

For 2001, Sunrise Telecom posted net sales of \$79.1 million and maintained a gross margin of 68 percent. Pro-forma net income, excluding non-cash charges of amortization for goodwill and deferred compensation, was \$10.0 million for 2001, or \$0.19 per diluted share. Net income including non-cash charges for 2001 was \$2.8 million or \$0.05 per diluted share. Pro forma net income, excluding non-cash charges, as a percentage of net sales was 13% for 2001.

Our past focus on product and market diversification yielded key benefits in 2001. Revenue from new optical, cable and signaling products represented 38% of sales in 2001 up from 2% in 1999. Our product diversification strategy helped offset the decline in our traditional wireline access products in 2001.

Through careful stewardship of operating expenses and global customer focus, our financial statements remain strong. We ended 2001 with \$52.2 million in cash and short-term investments; international sales represented 38% in 2001 compared with 27% in 2000, and no significant interest bearing debt. We also achieved profitability while investing heavily in research and development to generate future revenue streams.

Through internal development and selective acquisitions, we further broadened and diversified our product portfolio among our four target markets: wireline access, optical, cable TV, and signaling. Our acquisitions of Avantron at the beginning of 2001 and the CaLan Cable TV Test business from Agilent Technologies completed at the beginning of 2002, strengthen our cable TV test offerings worldwide and position Sunrise Telecom to move toward the number two position for field applications in this sector.

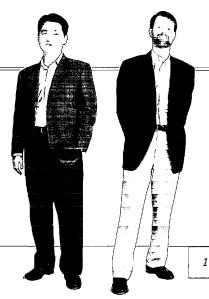
Looking forward, we see a telecom market driven by technological change, yet temporarily suffering from over-investment. Powerful technology drivers should ensure this market's future dynamism. However, the fall-out from the telecom business failures of 2000 and 2001 will continue to reduce networking capital expenditures in 2002. In this environment, Sunrise Telecom remains committed to providing innovative, reliable, and cost-effective solutions to meet our customers' needs—a step ahead of the competition.

Paul Ker-Chin Chang Chief Executive Officer, President and Chairman of the Board

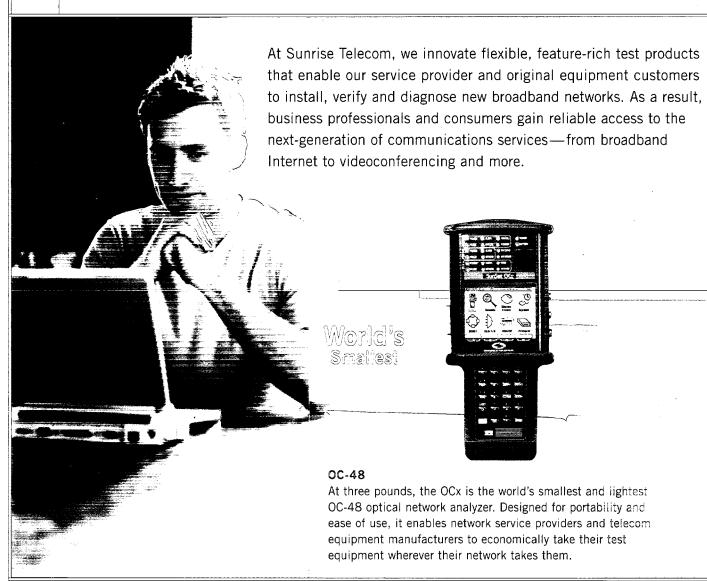
Paul A. Marshall Chief Operating Officer,

Vice President of Marketing and Director

March 15, 2002







Innovations Timeline

OCTOBER 1991
LAUNCHES
SUNRISE
TELECOM
Focused on
developing
lightweight,
feature-rich telecommunications
field test
equipment.

Q3 1992
INTRODUCES
FIRST NORTH
AMERICAN
PRODUCT
Lightweight T1
test set costing
less than onethird competing
products.

Q4 1992
INTRODUCES
FIRST INTERNATIONAL PRODUCT
Lightweight
E1 test set with
outstanding
cost and weight
advantages.

Q4 1998
INTRODUCES
SUNSET XDSL
First modular
xDSL test platform to trouble
shoot DSL
networks.

Q3 1999
ACQUIRES HUKK
ENGINEERING
Sunrise makes
entrance into
cable market.

Q4 1999
ANNOUNCES
SUNSET OCX
Sunrise makes
entrance into
optical segment
with first threepound, field
network analyzer
for optical
networks.

Q1 2000
ACQUIRES
PRO. TEL
Sunrise makes
entrance into
signaling market
with the introduction of
the Gephardo
network protocol
analyzer server.





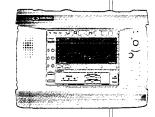
10G

Continuing in our tradition of offering the industry's smallest and most feature-rich test sets, the SunSet 10G is the smallest and lightest 10 Gbps optical test set on the market today. Weighing just four pounds and featuring an expanded color display, it's an ideal solution for field technicians and lab engineers.

Moving Toward

#2

in Cable TV Field Test



Sunrise Telecom Broadband

In 2002, Sunrise Telecom acquired the CaLan Cable TV Test business from Agilent Technologies, which not only further broadened our cable TV test offering worldwide, but also positioned Sunrise to move toward the number two position in this focused field-service market segment.





Sunset MTT (Modular Testing Toolkit)

Building on the modular legacy of the award-winning SunSet xDSL, the SunSet MTT features 20 different plug-in modules, giving access network technicians the industry's broadest selection of test options to install, varify and troubleshoot service technologies.

Q2 2000
INTRODUCES
THE SUNSET SDH
Sunrise
announces the
sister product
of the SunSet
OCx for international optical
network test.

Q4 2000
INTRODUCES
CM1000
Introduces
first handheid
cable analyzer
for both
upstream
and downstream
DOCSIS
compliant
systems.

Q1 2001
ACQUIRES
AVANTRON
Sunrise bolsters
cable offering
with acquisition
of high-end
cable TV test
equipment and
performance
monitoring
systems.

Q1 2001
INTRODUCES THE
SUNSET OC-48
Sunrise extends
the SunSet OCx
to test optical
fiber at speeds
up to OC-48.

Q2 2001
INTRODUCES
SUNSET 10G
HAND-HELD
TEST SET
Sunrise
announces the
lightest and
smallest 10
Gbps optical
test set on
the market.

Q1 2002
ANNOUNCES
SUNSET MODULAR
TESTING TOOLKIT
(MTT)
Unveils new
chassis for the
wireline access
technician;
currently
supports
20 modules.

Q1 2002
ACQUIRES CALAN
Sunrise acquires
Agilent Technologies' CaLan Cable
TV Test business to further
strengthen global
presence and
product portfolio
of Broadband
Division.

At A Glance

Office Locations

Headquarters – San Jose 302 Enzo Drive San Jose, CA 95138

Broadband Division – Atlanta 3250-D Peachtree Corners Circle Norcross, GA 30092

Broadband Division - Montreal 10281 Renaude-Lapointe Anjou (QC) 1J 2T4 Canada

Sunrise Telecom Pro.Tel Via Jacopo Peri. 41/c 41100 Modena, Italy

Sunrise Telecom China Room 57241, 57242, 57243 Xi Yuan Hotel. Beijing, Xi Cheng District 100044 China

Sunrise Telecom Japan Aoyamakouei Bldg. 3F 7-24. Kitaaoyama 2-Chome Minato-Ku, Tokyo 107-0061 Japan

Sunrise Telecom Korea #13-31 KOAMI B/D 6F Yoido-Dong Youngdungpo-Gu Seoul 150-010 Korea

Sunrise Telecom Taiwan 301, 142. Shin Ming Rd., Nei Hu, Taipei, Taiwan, 114, R.O.C.

Selected Customers in 2001

AT&T Corporation

AOL Time Warner, Inc.

Bell Canada Enterprises, Inc.

BellSouth Telecom, Inc.

Charter Communications, Inc.

Chunghwa Telecom Co., Ltd.

Cox Communications, Inc.

France Telecom

Korea Telecom

Lucent Technologies

Qwest Communications
International Inc.

SBC Communications, Inc.

Sprint Corporation

Telecom Italia Mobile S.p.A.

Telephonos de Mexico, S.A.

Telcom SA, Ltd.

Verizon Communications, Inc.

Global Diversification



2000 Revenue \$113.5 Million

■ USA 73% The International 27%



2001 Revenue \$79.1 Million

■ USA 62% International 38%

Revenue and Market Diversification



1999 Revenue \$61.5 Million

Wireline Access	98%
Fiber Optics	09
Cable TV	29
Signaling	0%



2000 Revenue \$113.5 Million

Wireline Access	80%
# Fiber Optics	12%
■ Cable TV	4%
■ Signaling	4%



2001 Revenue \$79.1 Million

Wireline Access	62%
■ Fiber Optics	19%
■ Cable TV	14%
Signaling	5%

Principal Products

Handheld and central office equipment for wire line access; xDSL, T-carrier, PDH, ISDN, handheld and head-end test equipment for cable TV/broadband; spectrum analyzers, monitoring, RF signal generation, QAM/SLM.

Handheld test sets for optical networks; SONET, SDH.

Signaling equipment for global protocol evaluation; LAN/WAN, network surveillance, SS#7, VoIP, GSM, GPRS.

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

X ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2001

Commission File Number: 0-30757

Sunrise Telecom Incorporated

(Exact name of Registrant as specified in its charter)

Delaware

77-0291197

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

302 Enzo Drive, San Jose, California 95138 (Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (408) 363-8000

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, par value \$0.001 per share

(Title of class)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ⊠	No 🗌
Indicate by	y check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein,
and will n	not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements
incorporate	ed by reference in Part III of this Form 10-K or any amendment to this Form 10-K. \square

As of March 1, 2002, the aggregate market value of the Common Stock of the Registrant held by non-affiliates was \$45,468,715.

As of March 1, 2002, there were 50,514,209 shares of the Registrant's Common Stock outstanding, par value \$0.001.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2002 Annual Meeting of Shareholders are incorporated by reference in Part III.

SUNRISE TELECOM INCORPORATED

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Forward-Looking Statements

This report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities and Exchange Act of 1934, including, without limitation, statements regarding possible growth in the market for telecommunications test equipment and new product development. Except for historical information, the matters discussed in this report on Form 10-K are forward-looking statements that are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected due to certain factors, including those discussed below in "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operation—Factors Affecting Future Operating Results" and elsewhere in this report. You should not rely on forward-looking statements in this report or in the pages from our Proxy Statement incorporated by reference into this report. The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Report on Form 10-K.

Part I.

ITEM 1. BUSINESS

OVERVIEW

We manufacture and market service verification equipment that enables service providers to pre-qualify facilities for services, verify newly installed services, and diagnose problems relating to telecommunications, cable TV, and Internet networks. Our products offer broad functionality, leading edge technology, and compact size to test the variety of new broadband services; these include wire line access services (including DSL), fiber optics, cable TV networks, and signaling networks. We design our products to maximize technicians' effectiveness in the field and to provide realistic network simulations for equipment manufacturers to test their products. Our customers include incumbent local exchange carriers, competitive local exchange carriers, and other service providers, network infrastructure suppliers, and installers throughout North America, Latin America, Europe, and the Asia/Pacific region.

In October 1991, we were incorporated in California as Sunrise Telecom, Inc. In July 2000, we reincorporated in Delaware and changed our name to Sunrise Telecom Incorporated ("Sunrise"). "Sunrise Telecom," "SunSet," and "SunLite" are trademarks of Sunrise Telecom Incorporated. This Report on Form 10-K also includes references to registered service marks and trademarks of other entities.

RECENT DEVELOPMENTS

Acquisition of the CaLan Cable TV Test Business from Agilent Technologies

In February 2002, we acquired the CaLan Cable TV test business from Agilent Technologies for approximately \$7.2 million in cash. CaLan products incorporate DigiSweep technology, the industry's fastest, high resolution, digital services-compatible sweep. CaLan products are designed to support a complete range of remote and field maintenance activities, from forward and return path alignment, to signal measurement and ingress troubleshooting.

INDUSTRY BACKGROUND

High-Speed Data Access

Data traffic in the United States and Canada has surpassed the amount of voice traffic carried on the existing telephone network. Consumers are seeking higher-speed access to bandwidth intensive content and services, such as highly graphical Web sites, audio, video, and software downloads. As an increasing number of Internet users access more and different content, the ability to connect to and receive data from the Internet at high speeds has become and will continue to become more important.

One primary investment area is the redesign of the access network to support broadband access to end users. This portion of the network between the customer's premise and the service provider's central office is also known as the "last-mile." The last mile typically consists of copper wires that operate at substantially lower transmission speeds than those offered in the long-haul segment of a network or by some available broadband alternatives. These copper wires were originally intended to carry only analog circuit-switched, low-speed voice signals and, as a result, have become a bottleneck that limits high-speed data transmission. Several access technologies are being deployed to support higher-speed Internet access in the networks, including digital subscriber lines, digital cable TV/MODEM, fiber optics, and broadband wireless. In addition, the signaling portion of the network is essential to the integration of new broadband services into the existing telecommunications network. We summarize some of these technologies below.

Wire line Access Technology. Wire line access technology, including DSL technology, transmits data up to 50 times faster than a conventional dial-up modern using existing copper telephone wires. The early adoption of high speed transmission included technologies such as T-carrier, E-carrier, ISDN, and most recently DSL.

Digital Subscriber Line Technology. Digital subscriber line technology, commonly known as DSL, today transmits data up to 50 times faster than a conventional dial-up modem using the existing copper telephone wires. Various implementations of DSL are being developed and deployed, including asymmetric DSL, known as ADSL, symmetric DSL, known as SDSL, high bit-rate DSL, known as HDSL, and integrated services digital network DSL, known as IDSL. Service providers deploying DSL technology include incumbent local exchange carriers, such as SBC Communications, Inc., Verizon Communications, Inc., and Sprint Corporation.

Cable TV Networks. Cable TV operators use two-way cable, cable modems installed in the home, cable modem termination systems installed at major cable concentration points, and network headend equipment designed to interface their cable TV networks to video feeds and other networks. Several cable companies are currently offering broadband access services across two-way cable, including AT&T Broadband, Charter Communications, Cox, and TimeWarner Cable.

Fiber Optics. Fiber optic cables use pulses of light to transmit digital information. Because fiber optic cables support thousands of high-speed, local digital connections onto a single higher-speed connection to the central office or the central side of the cable TV network where the video signals emanate, they offer virtually unlimited bandwidth capacity. Due to their high capacity, fiber optic cables are being used increasingly in the access network in both telecommunications and cable TV applications.

Signaling. Telephone systems require a signaling mechanism to set up and end phone calls. These signals serve three basic functions: supervising or monitoring the status of a line on circuit to see if it is busy, idle, or requesting service; alerting or indicating the arrival of an incoming call; and addressing or transmitting routing and destination signals over the network. Signaling Systems 7, or SS7, is the standard signaling system used by telecom networks worldwide. Signaling networks must support new access technologies to ensure interoperability with the existing telephone network.

The Need for Service Verification Equipment

In order to deploy and maintain successfully broadband networks, service providers rely on sophisticated service verification equipment. This equipment allows service providers to pre-qualify facilities for services, verify proper operation of newly installed services, and diagnose problems. In addition, equipment manufacturers use service verification equipment to test simulated networks during equipment development and verify the successful production of equipment. Service verification equipment can be grouped into the following three types: field verification, remote testing, and alarm and surveillance.

Field Verification Equipment. Field verification equipment is used by service providers to probe the actual wires, cables, or airwaves to verify that a service works. In the case of a service malfunction, a field technician can use the equipment to locate the exact fault so that repairs can be made. Research and development labs, manufacturing departments, and central office technicians also use field verification equipment in their day-to-day operations. Of the three types of service verification equipment, field verification equipment delivers the most detailed service information. Service providers have found field verification to be an effective method to ensure that the lines operate properly.

Remote Test Equipment. Remote test equipment can help verify services and identify certain types of service malfunctions from a centralized location. The equipment is typically controlled by a centralized test system that automates much of the remote testing process. It is commonly used to determine which section within a 3,000 mile circuit has malfunctioned and to diagnose quickly the nature of a customer's complaint. Due to its centralized and automated nature, remote test equipment is an efficient way to complement field test equipment in the deployment and maintenance of broadband networks.

Alarm and Surveillance Equipment. Alarm and surveillance equipment constantly monitors the telephone network, searching for facility or service degradations, including outages. When a problem is noticed, a report may be sent immediately to an automated trouble diagnostic system or to a human operator who interprets the message and decides what further action is required. Corrective action typically involves field verification or remote test equipment to identify and correct specific problems.

Because the competition for subscribers for high-speed bandwidth access is intense, the quality and reliability of network service has become critical to service providers because of the expense, loss of customers, and negative publicity resulting from poor service. Field technicians who use service verification equipment allow service providers to verify and repair service problems effectively and, thus, increase the quality and reliability of the network. We believe that as broadband services are deployed further and as competition for subscribers proliferates, service providers will increasingly depend on advanced field test and monitoring solutions.

THE SUNRISE SOLUTION

We design and manufacture service verification equipment that enables service providers to pre-qualify facilities for services, verify newly installed services, and diagnose problems relating to wire line access services, including DSL services, fiber optic, cable TV, and signaling networks. Our products also enable equipment manufacturers to test simulated networks during equipment development and verify the successful production of equipment. Our field products offer the following features:

- Design Flexibility. We design our products to be flexible and to evolve as customer needs change. Our CM 1000, SunSet MTT and SunSet xDSL product lines, for example, allow field technicians the ability to upgrade their equipment easily through a variety of plug-in hardware modules. This flexible design allows the customer to adapt the test set to new services and applications as network standards evolve.
- Customer Driven Features. Each of our products is tailored to our customers' needs. Our marketing
 engineers interact with our customers during the design process to ensure that our products are the best
 available solution for them.
- Handheld Design. We design most of our products to be used in the field. The compact, lightweight design of these products enhance field technicians' ability to access problems and verify line operation. The SunSet OCx for example, is the first asynchronous transfer mode fiber optic field testset small enough to be grasped in the palm of the technician's hand.

Because of the design and functionality of our products, we provide the following benefits to our customers:

- Rapid and Efficient Deployment. Our products allow field and office technicians to test lines rapidly and
 efficiently to ensure that they are properly connected to the central office and that they can support a specific
 type and speed of service. In a single device, our products can be used to pre-qualify facilities for services,
 identify the source of problems, and verify the proper operation of newly installed service before handing
 service over to customers.
- Improved Network Quality and Reliability. Our products diagnose and locate a variety of problems and degradations in established broadband networks allowing service providers to identify and repair problems and to restore service efficiently.

PRODUCTS

We currently offer two main categories of service verification products: broadband access service verification products and signaling testing products.

Broadband Access Service Verification Products

Our broadband access service verification products support a wide range of access technologies, including DSL, cable TV, and fiber optics, for both U.S. and international standards.

Our products enable technicians to verify if a broadband service has been properly installed and to identify and correct problems in case of an error. Our products are designed to be carried into the field by a technician and have a large graphical display, menu-driven functionality, an easy-to-use interface, and in most cases weigh less than three pounds. Many of our models support plug-in hardware modules that enable technicians to upgrade the test sets quickly and easily.

Sales of our wire line access products accounted for 62% of our net sales in 2001, 80% in 2000, and 98% in 1999. Although we have introduced or acquired fiber optic, cable TV, and signaling products, we expect that sales of wire line access products may continue to account for a significant percentage of our net sales for the coming year and foreseeable future, yet contribution of revenue from our other product segments may continue to represent a larger percentage of our revenue reflecting a more diversified product revenue base.

Within our broadband access testing products, we manufacture service verification equipment for three main technologies: wire line access, cable TV, and fiber optics. We describe our major products in each product category below.

WIRE LINE ACCESS PRODUCTS

Global Wire Line Access and DSL

Global DSL products allow worldwide telecommunications service providers to install and troubleshoot digital copper-based circuits and services. The xDSL series finds data transmission rates and noise margins that can be supported by the line. This series employs modules to test DSL and other digital transmission types, such as T1 which is used by large businesses for broadband access. Our modular architecture allows technicians to use a single unit to test a variety of DSL services. In addition, the flexibility of the modular architecture protects a customer's investment in the test equipment.

SunSet MTT Family

 This Modular Test Toolkit features a handheld test chassis and supports 20 different test modules for a variety of special service, DSL, and physical layer twisted pair test applications. The MTT is based on the SunSet xDSL family but includes optional next generation twisted pair measurements and high resolution color screen.

SunSet xDSL Family

 The original handheld unit for DSL service verification. This product supports all Sunrise DSL modules to allow field technicians to test various types of DSL technologies

Oculist

 The Oculist puts our DSL technology into a variety of central office and laboratory test applications.

SunSet ISDN, SunLite BRI

 These products support analysis and service verification for the integrated services digital network, known as ISDN. ISDN is an enhanced digital network that offers more bandwidth than the traditional telephone network.

North American Wire Line Access

We design our North American wire line access products specifically for the North American market and support applications common to this market such as T1, a standard for digital transmission in North America used by large businesses for broadband access.

SunSet T1

• Handheld unit that supports transmission testing for T1, including service verification for voice services.

SunSet T10

• Handheld unit that supports transmission testing for T1, with service verification and diagnostics for multiple data protocols and voice services.

SunSet T3

 Handheld unit that offers the versatility to test multiple transmission types in a single unit and support areas that have international and North American standards. It also offers service verification and diagnostics for integrated services digital network, known as ISDN, and voice services.

International Wire Line	Access
	We design international wire line access products specifically for testing lines outside the North American market and to support protocols common to the international market such as E1, a standard for international digital transmission used by large businesses for broadband access.
SunLite E1	 Handheld unit that supports transmission testing in a small test set for E1.
SunSet E1, E8	 Handheld unit that supports transmission testing and service verification for E1 and voice services.
SunSet E10, E20	 Handheld unit that supports transmission testing for E1, and service verification for data protocols, voice, and other signaling protocols.
SunSet PDH	 Handheld unit that supports transmission testing for E1 and higher transmission rates.
CABLE TV PRODUCTS	
CR1200R	 Portable unit for field transmission analysis of digital and analog cable TV networks including both inbound and outbound signals. The CR1200R also looks for common transmission problems in cable TV digital networks that could inhibit Internet services. The unit is water resistant, portable, and can be used without additional equipment.
CM-1000 CE-4000	 Handheld units for installation and troubleshooting of DOCSIS Cable Modem installations. The CM1000 has a built-in cable modem to communicate with the Cable Modem Termination System to characterize the digital performance in both the upstream and downstream paths.
AT-2000R	 Lightweight, portable, rugged, full-featured CATV Spectrum Analyzer that performs advanced field testing which includes finding fast transient ingress, measuring carrier to noise ratios up to 60 dB at low levels, accurately measuring digital carriers, and performing complex proof of performance testing.
АТ-2000НМ	 Headend Spectrum Analyzer that provides remote headend testing and return path monitoring. Allows monitoring of signals from 1 MHz to 1 GHz, allowing the forward path to be monitored in addition to the reverse path.
FIBER OPTIC PRODUCTS	}
SunSet OCx SunSet 10G	 Handheld unit that supports transmission testing for multiple varieties of SONET. It includes both electrical and optical signal testing and performs service verification for various services such as asynchronous transfer mode. The SunSet OCx is currently the smallest multi-rate optical test set available.
SunSet SDH SunSet 10G	 Handheld unit that supports fiber optic transmission types, such as SONET and synchronous digital hierarchy, for traditional North American and international digital transmission types. The SunSet also supports testing for asynchronous transfer mode.

Ghepardo Central office unit to analyze major signaling protocols, including SS7, and standard data communication protocols. Open platform design with hardware and software that users can customize easily. Web-based user interface allows users to control our products, including customization of test functions, from anywhere in the world through standard web-browser software.

CUSTOMERS

Our customers include telecommunications service providers, network infrastructure suppliers and installers, technicians and engineers in North America, Latin America, Europe, Africa, the Middle East, and the Asia/Pacific region. The following is a selected list of our customers in 2001.

AT&T Corporation

AOL Time Warner, Inc.

Bell Canada Enterprises, Inc.

BellSouth Telecom, Inc.

Charter Communications, Inc.

Chunghwa Telecom Co., Ltd.

Cox Communications, Inc.

Korea Telecom

Lucent Technologies

Qwest Communications International, Inc.

SBC Communications Inc. (consisting of Ameritech Corporation, Nevada Bell, Pacific Bell, Southern New England Telephone, Advanced Solutions, Inc., and Southwestern Bell Telephone Company)
Sprint Corporation
Telecom Italia Mobile S.p.A.
Telephonos de Mexico, S.A.
Telkom SA, Ltd
Verizon Communications, Inc.

As of December 31, 2001, we had sold versions of our products to over 2,000 customers in over 60 countries. Affiliates of SBC Communications accounted for approximately 5% of our net sales in 2001, 16% in 2000, and 41% in 1999. Additionally, 8% of our net sales in 2001 and 17% of our net sales in 2000 were generated from an OEM product sold to Lucent Technologies or to Solectron, a contract manufacturer that integrates this product into the Stinger DSLAM that it manufactures for Lucent Technologies. The initial order from Lucent Technologies for the Copper Loop Test Head was completed during the second quarter of 2001. Significant future orders of this Copper Loop Test Head product remains uncertain. Besides SBC Communications and Lucent Technologies/Solectron, no individual customer accounted for 10% or more of our net sales in 2001, 2000, and 1999. We expect, however, that we will continue to depend upon a relatively limited number of customers for substantially all of our revenues in future periods. See "Item 7—Factors Affecting Future Operating Results—Customer Concentration."

SALES, MARKETING AND CUSTOMER SERVICE

Sales. We sell our products to telecommunications service providers, network infrastructure suppliers and installers, technicians, and engineers through manufacturer's representatives, independent distributor organizations, and our direct sales force.

In the United States, we sell our products through 15 manufacturer's representatives who are supported by our inhouse direct sales force. Manufacturer's representatives are paid on a commission basis and have exclusive rights in their respective regions. Our manufacturer's representatives solicit orders from the customer, and we ship our products directly to the customer. We pay commissions once we have received payment from the customer. Our direct sales force consists of 19 employees who focus on sales in the United States, including a team of regional sales managers who direct the efforts of our manufacturer's representatives, regional account managers who focus on specific accounts within a region, and our Vice President of North American Sales, who directs the sales effort in North America.

Outside the United States, we sell our products through 90 independent distributor organizations, which are directed by our regional directors of marketing and sales. We sell our products to the distributor who then resells the products to the end user. We sell our products to our independent distributor organizations at a discount from our list price. International sales, including North American sales to Canada, were \$29.7 million or 38% in 2001, \$30.1 million or 27% in 2000 and \$12.2 million or 20% in 1999. We expect that international sales will continue to account for a significant portion of our net sales in future periods. In addition to our network of international distributors, we have sales people located in Anjou, Canada; Beijing, China; Tokyo, Japan; Seoul, Korea; and Modena, Italy. See "Item 7—Factors Affecting Future Operating Results—Risks of International Operations." For information regarding export sales and international operations, see Note 14 of the notes to consolidated financial statements of Sunrise.

We sell our products predominantly to large telecommunications service providers. These prospective customers generally commit significant resources to an evaluation of our and our competitors' products and require each vendor to expend substantial time, effort, and money educating the prospective customer about the value of the vendor's solutions. Consequently, sales to this type of customer generally require an extensive sales effort throughout the prospective customer's organization and final approval by an executive officer or other senior level employee. The result is lengthy sales and implementation cycles, which make sales forecasting difficult. In addition, even after a large telecommunications service provider has approved our product for purchase, their future purchases are uncertain because we do not enter into long-term supply agreements or requirements contracts with those parties. Delays associated with potential customers' internal approval and contracting procedures, procurement practices, and testing and acceptance processes are common and may cause potential sales to be delayed or foregone. As a result of these and related factors, the sales cycle of new products for large customers typically ranges from six to twenty-four months. Over the past year, our major customers have decreased the volume of orders, implemented longer purchase cycles, and decreased capital expenditures for telecom and cable equipment.

Marketing. We market and promote sales of our products by the following activities:

- Our product marketing group researches new opportunities, prepares product definitions with our research and development group, and defines new features to create new products;
- The overall marketing group hosts a variety of seminars several times a year in the United States, Asia, Europe, and Latin America to improve the sales effectiveness of our manufacturers' representatives and international distributors;
- Our product marketing engineers, regional sales managers, and account managers travel extensively with our manufacturers' representatives and international distributors to develop new product opportunities with customers and to support their presentations;
- The marketing communications group maintains a public Web site, publishes brochures and specification sheets, and generates press releases and publicity to increase our recognition in the telecommunications industry;
- Our technical publications group prepares user's manuals, field manuals, quick reference guides, and product operation videos to serve the needs of our users;
- Our training department prepares customer training presentations and sponsors Sunrise University, a factorybased training program for our customers.

Customer Service. We believe that customer service following the sale of our products is a critical ingredient to our success. We provide customer service in numerous ways, including the following:

providing rapid instrument repair services;

- operating a 24 hour per day telephone support line to help customers who are having difficulty using our products in their particular application;
- maintaining a proprietary Web site containing on-line, up-to-the-minute product repair information for our distributors' international repair centers, with a factory-certified technician training program for our distributors' international repair center technicians; and
- measuring the satisfaction of our customers and communicating this information to our quality group.

RESEARCH AND DEVELOPMENT

We have assembled a team of highly skilled engineering professionals who are experienced at designing telecommunications and cable TV service verification test equipment. Our engineering personnel have expertise in a number of fields, including interfacing test equipment with digital loop carrier, voice and data switching technology, local loop equipment, and operations support systems. We spent approximately \$18.5 million on research and development in 2001, \$17.6 million in 2000, and \$10.7 million in 1999. Research and development represents our largest direct employment expense. At December 31, 2001, we had a total of 136 employees engaged in research and development in San Jose, California; Norcross, Georgia; Anjou, Canada; Modena, Italy; Taipei, Taiwan; and Seoul, Korea.

We believe that our continued success depends on our ability to anticipate and respond to changes in the telecommunications industry and anticipate and satisfy our customers preferences and requirements. Accordingly, we continually review and evaluate technological and regulatory changes affecting the telecommunications industry and seek to offer products and capabilities that solve customers' operational challenges and improve their efficiency. In general, we spend anywhere from two months to four years developing a new product.

REGULATIONS AND INDUSTRY STANDARDS

Our products are designed to comply with a significant number of industry standards and regulations, some of which are evolving as new technologies are deployed. In the United States, our products must comply with various regulations defined by the Federal Communications Commission and Underwriters Laboratories as well as industry standards established by Telcordia Technologies, Inc., formerly Bellcore, and the American National Standards Institute. Internationally, our products must comply with standards established by the European Committee for Electrotechnical Standardization, the European Committee for Standardization, the European Telecommunications Standards Institute, telecommunications authorities in various countries, and with recommendations of the International Telecommunications Union. The failure of our products to comply, or delays in compliance, with the various existing and evolving standards could negatively impact our ability to self our products.

MANUFACTURING

Our production process consists of planning, procurement, fabrication, rework, system assembly, system final test, software option customization, and shipping. We purchase substantially all parts, including resistors, integrated circuit boards, LCDs, and printed circuit boards, from distributors and manufacturers worldwide. We package these parts into kits and send them to contract manufacturers to assemble them into printed circuit boards. We perform substantially all remaining manufacturing operations. We maintain sourcing and manufacturing operations in San Jose, California; Norcross, Georgia; Anjou, Canada; Taipei, Taiwan; and Modena, Italy. In 2001, we performed the majority of sourcing, contract manufacturing, and final assembly in San Jose, California and Taipei, Taiwan. We have obtained ISO-9001 certification for our San Jose, California and Modena, Italy operations. In 2002, we plan to increase Taiwan manufacturing capacity while reducing San Jose capacity to increase overall production cost effectiveness.

In 1998, we formed a subsidiary in Taiwan, Taiwan Sunrise Telecom Company Limited, as a turn-key manufacturer and local procurement operation. We also own an equity interest of 9% in Top Union, a manufacturing company located in Taipei, Taiwan that has performed board level manufacturing as part of the Taiwan Sunrise Telecom Company Limited turn-key operation. We intend to increase the use of our Taiwan subsidiary for complete turn-key manufacturing. We believe that increased use of our Taiwan manufacturing plant will lower our manufacturing costs, particularly our labor costs, provide us with more flexibility to scale our operations to meet changing demand, and allow us to focus our engineering resources on new product development and product enhancements.

In our manufacturing process, we purchase many key products, such as microprocessors, bus interface chips, optical components, and oscillators, from a single source or from that product's sole supplier. We rely exclusively on third-party subcontractors to manufacture certain sub-assemblies, and we have retained, from time to time, third party design services in the development of our products. We do not have long-term supply agreements with these vendors. In general, we make advance purchases of some products and components to ensure an adequate supply, particularly for products that require lead times of up to nine months to manufacture. For a discussion of the risks associated with our reliance on these third parties, see "Item 7—Factors Affecting Future Operating Results—Dependence on Sole and Single Source Suppliers."

COMPETITION

The market for field verification test equipment is fragmented and intensely competitive, both inside and outside the United States, and is subject to rapid technological change, evolving industry standards, regulatory developments, and varied and changing customer preferences and requirements. We compete with a number of United States and international suppliers that vary in size and in the scope and breadth of the products and services offered. The following table sets forth our principal competitors in each of our product categories:

Product Category	Principal Competitors
Wire Line Access	Acterna Corporation; Agilent Technologies, Inc.
Fiber Optics SONET/SDH	Digital Lightwave, Inc.; Acterna Corporation; Agilent Technologies, Inc.
Cable TV	Acterna Corporation; Agilent Technologies, Inc.
Signaling	Inet Technologies, Inc.; GN Nettest

We expect that, as our industry and market evolves, new competitors or alliances among competitors could emerge and acquire significant market share. We anticipate that competition in our markets will increase with the result that we will face greater threats to our market share, price pressure on our products, and the likelihood that, over time, our profitability may decrease.

We believe that the principal competitive factors in our market include the following:

- o a continued high level of investment in research and development and marketing;
- speed of new product introductions to market;
- depth of product functionality;
- ease of installation, integration, and use;
- system reliability and performance;
- price and financing terms;
- technical support and customer service;
- size and stability of the vendor's operations; and
- compliance with government and industry standards.

INTELLECTUAL PROPERTY AND PROPRIETARY TECHNOLOGY

Our intellectual property, including our proprietary technology, processes and know-how, trade secrets, patents, trademarks, and copyrights, is important to our business and to our continued success. We have two patents relating to communications testers, and we have filed several applications for additional patents with the U.S. Patent and Trademark Office and with foreign patent offices. Our research and development and manufacturing process as typically involve the use and development of a variety of forms of intellectual property and proprietary technology, although no one form of this intellectual property and proprietary technology is material to our business. In addition, we incorporate software, some of which we may license from several third party sources. These licenses generally renew automatically on an annual basis. We believe that alternative technologies for this licensed software are available both domestically and internationally.

We protect our proprietary technology by the following means:

- relying on intellectual property law, including patent, trade secret, copyright, and trademark law and by initiating litigation when necessary to enforce our rights;
- limiting access to our software, documentation, and other proprietary information; and
- entering into confidentiality agreements with our employees.

In the future, we may receive notices from holders of patents that raise issues as to possible infringement by our products. As the number of telecommunications test, measurement, and network management products increases and the functionality of these products further overlap, we believe that we may become subject to allegations of infringement given the nature of the telecommunications industry and the high incidence of these kinds of claims. Questions of infringement and the validity of patents in the field of telecommunications technologies involve highly technical and subjective analyses. These kinds of proceedings are time consuming and expensive to defend or resolve, result in substantial diversion of management resources, cause product shipment delays, and could force us to enter into royalty or license agreements rather than dispute the merits of the proceeding initiated against us. For more information regarding the risks to our intellectual property, see "Item 7—Factors Affecting Future Operating Results—Intellectual Property Risks."

EMPLOYEES

At December 31, 2001, we had a total of 390 full-time employees, consisting of 248 in the United States, 32 in Taiwan, 44 in Italy, 43 in Canada, 14 in Korea, 6 in China, and 3 in Japan. We also had 4 temporary employees at December 31, 2001. Of the total full-time employees, 136 were engaged in research and development, 114 were engaged in sales, marketing and customer support, 87 were engaged in operations, and 53 were engaged in administration and finance. None of our employees is subject to a collective bargaining agreement. The employees of our Pro.Tel subsidiary are protected by certain provisions of Italian law. We believe that our relations with our employees are good. See "Item 7—Factors Affecting Future Operating Results—Need for New Personnel" and "—Dependence on Key Employees."

EXECUTIVE OFFICERS

The names and ages of our executive officers as of December 31, 2001 are as follows:

Mame	Age	Position(s)
Paul Ker-Chin Chang	43	Chief Executive Officer, President, and Director
Paul A. Marshall	44	Chief Operating Officer, Vice President Marketing, and Director
Peter L. Eidelman	35	Chief Financial Officer and Treasurer
Raffaele Gerbasi	40	Vice President and General Manager Cable Broadband Group
Jeong E. Joo	37	Chief Technology Officer

Paul Ker-Chin Chang co-founded Sunrise in October 1991 and has served as Chief Executive Officer, President, and Chairman since that time. From 1984 to 1991, Mr. Chang was employed as Engineering Supervisor for the Wiltron division of Anritsu Corporation, a manufacturer of communications test equipment. Mr. Chang holds an M.S. in Electrical Engineering from the University of Kansas at Lawrence and a B.S. in Physics from Tunghai University in Taiwan.

Paul A. Marshall co-founded Sunrise in October 1991 and has served as Chief Operating Officer since December 1999, as Vice President of Marketing since March 1992, and as a director since October 1991. Mr. Marshall also served as Chief Financial Officer of Sunrise until December 1999. From 1980 to 1992, Mr. Marshall held various positions with the Wiltron division of Anritsu Corporation, most recently as Marketing Staff Engineer. Mr. Marshall holds an M.B.A. from the Harvard Business School and a B.S. in Mechanical Engineering from the University of California at Davis.

Peter L. Eidelman joined Sunrise in July 1997 and has served as Chief Financial Officer and Treasurer since December 1999. Mr. Eidelman served as Sunrise's Treasurer and Director of Finance and Administration from January 1999 to December 1999 and as Director of Tax, Finance, and Accounting from July 1997 to January 1999. Mr. Eidelman was employed as a Manager of Tax, Accounting, and Compliance for Amdahl Corporation, an enterprise solution company, from July 1994 to July 1997. From November 1988 to July 1993, Mr. Eidelman was employed as a Tax Manager at Coopers & Lybrand, an international accounting firm. Mr. Eidelman holds a B.B.A. in Accounting from the University of Massachusetts at Amherst. Mr. Eidelman is a member of the A.I.C.P.A. and the Tax Executive Institute.

Raffaele Gerbasi joined Sunrise in January 2001 and has served as Vice President and General Manager Cable Broadband Group since September 1, 2001. Mr. Gerbasi served as President of the Sunrise Telecom subsidiary Avantron since January 8, 2001 following the acquisition of Canada-based Avantron Technologies, Inc. a manufacturer of advanced test equipment for the cable broadband industry. Mr. Gerbasi formed Avantron Technologies in 1989 as a wholly owned division of Dynastie Electronics and held the position of President. A graduate of the Radio Electronic Television School, Mr. Gerbasi started his career in the cable broadband industry in 1979. From 1979 to 1984, Mr. Gerbasi was employed as Technical Services Manager for Incospec Electronics, a Canadian cable broadband equipment company. In 1984, Mr. Gerbasi joined Dynastie, a cable broadband service and engineering company and became President and sole owner in 1987.

Jeong E. Joo joined Sunrise in March 1994 and has served as Chief Technology Officer since July 2001. Mr. Joo served as Director of Engineering-New Technologies from December 2000 to July 2001. Since joining Sunrise in 1994, Mr. Joo has held lead engineering development and management positions in the Engineering Department, contributing most recently to our fiber optics products. Mr. Joo held Engineering Management positions with Taihan Electric Wire, Co. Ltd., a telecom electronics company in Korea, from 1988 to March 1994. Mr. Joo holds a BSEE from Chungang University, Seoul, Korea.

ITEM 2. PROPERTIES

Our current headquarters and manufacturing facility occupies approximately 91,700 square feet in San Jose, California. We also lease approximately 17,784 square feet of office and manufacturing space in San Jose, California; approximately 10,000 square feet of office and manufacturing space in Montreal, Canada; approximately 16,500 square feet of office and manufacturing space in Norcross, Georgia; approximately 10,000 square feet of office and manufacturing space in Modena, Italy; 26,290 square feet of office space in Taipei, Taiwan; a liaison office in Beijing, China; and sales offices in Seoul, Korea and Tokyo, Japan. Additionally, as a result of our acquisition of CaLan Cable TV test business from Agilent Technologies in February 2002, we now lease an additional 6,742 square feet of office space in Santa Rosa, California.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

INFORMATION ABOUT OUR COMMON STOCK

Our common stock has been traded on the Nasdaq National Market under the symbol SRTI since our initial public offering on July 13, 2000. The following table sets forth, for the periods indicated, the highest and lowest closing sale prices for our common stock, as reported by the Nasdaq National Market.

2001	Migh	Low	2000	Migh	Fow
First Quarter	\$14.00	\$3.25	First Quarter	\$ —	\$ —
Second Quarter	\$ 9.21	\$5.40	Second Quarter	\$ —	\$ —
Third Quarter	\$ 6.60	\$4.47	Third Quarter	\$61.00	\$27.50
Fourth Quarter	\$ 5.15	\$3.51	Fourth Quarter	\$26.00	\$ 3.25

As of December 31, 2001, there were approximately 118 holders of record of our common stock.

We did not declare or pay any cash dividend on our common stock in 2001 and 2000. In the future, our board of directors will determine whether we will pay dividends on our common stock. Our line of credit restricts the payment of dividends on our common stock to dividends payable in common stock and to a maximum of \$1.0 million payable in any one fiscal year.

USE OF OUR INITIAL PUBLIC OFFERING PROCEEDS

Our registration statement (Registration No. 333-32070) under the Securities Act of 1933, as amended, for our initial public offering became effective on July 12, 2000. A total of 4,600,000 shares of common stock were registered and 3,817,428 shares of our common stock were sold to an underwriting syndicate. JPMorgan H&Q (formerly Chase H&Q), CIBC World Markets and U.S. Bancorp Piper Jaffray were the managing underwriters of the offering. An additional 782,572 shares of common stock were sold on behalf of selling stockholders as part of the same offering. All shares were sold to the public at a price of \$15.00 per share.

In connection with the offering, we paid approximately \$4.0 million in underwriting discounts and commissions to the underwriters. Offering proceeds, net of aggregate expenses to us of approximately \$1.6 million, were approximately \$51.6 million. None of the net proceeds from the offering were paid directly or indirectly to any director, officer, general partner of the Company or its associates, persons owning 10 percent or more of any class of equity securities of the Company or an affiliate of the Company.

We have used \$2.4 million of the net proceeds from the offering to repay amounts drawn under our line of credit and \$979,000 to repay notes payable. Additionally, we used \$11.9 million of the net proceeds for the acquisition of Avantron Technologies, \$7.2 million for the acquisition of CaLan Cable TV test business from Agilent Technologies, and \$14.4 million for the construction of our new facility. Funds that have not been used have been invested in money market funds, auction rate securities and marketable debt securities. None of the costs and expenses related to the offering were paid directly or indirectly to any director, officer, general partner of the Company or its associates, persons owning 10 percent or more of any class of equity securities of the Company or an affiliate of the Company.

We intend to use the remaining net proceeds of the offering for working capital and general corporate purposes and capital expenditures made in the ordinary course of our business. We may also apply a portion of the proceeds of the offering to acquire businesses or products and technologies that are complementary to our business and product offerings.

ITEM 6. SELECTED FINANCIAL DATA

The table below sets forth summary consolidated financial information for the periods indicated. It is important that you read this information together with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and the notes thereto included elsewhere in this Report on Form 10-K.

	Year Ended December 31,				
	2001	2000	1999	1998	1997
		(in thousands	, except per	share data)	
Consolidated Statements of Net Income:	ф 7 0.050	¢110.401	ФС1 4CE	400 F35	¢00.064
Net sales	\$ 79,059	\$113,481	\$61,465	\$28,535	\$29,064
Cost of sales	25,509	32,994	14,736	7,590	7,652
Gross profit	53,550	80,487	46,729	20,945	21,412
Operating expenses:					
Research and development	18,490	17,555	10,694	6,203	5,892
Sales and marketing	20,329	22,694	15,215	7,764	7,645
General and administrative	13,779	9,790	3,912	2,243	1,632
Total operating expenses	52,598	50,039	29,821	16,210	15,169
Income from operations	952	30,448	16,908	4,735	6,243
Other income, net	2,569	1,909	327	224	112
Income before income taxes	3,521	32,357	17,235	4,959	6,355
Income taxes	704	11,972	6,291	1,588	1,899
Net income	\$ 2,817	\$ 20,385	\$10,944	\$ 3,371	\$ 4,456
Dividends	<u> </u>	<u> </u>	\$ 223	\$ 89	\$ 89
Earnings per share: (1)					
Basic	\$ 0.06	\$ 0.43	\$ 0.25	\$ 0.08	\$ 0.10
Diluted	\$ 0.05	\$ 0.41	\$ 0.24	\$ 0.07	\$ 0.10
Shares used in computing earnings per share: (1)					!
Basic	50,195	47,374	44,667	44,537	44,645
Diluted	51,325	49,610	45,824	45,003	44,896
		De	ecember 31,		
	2001	2000	1999	1998	1997
		(in	thousands)		
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 48,713	\$ 56,298	\$ 8,615	\$ 5,030	\$ 2,409
Working capital	64,862	81,967	16,360	10,164	8,087
Total assets	126,621	125,556	38,266	17,193	14,678
Notes payable, less current portion	1,065	1,047	638	_	_
Total stockholders' equity	111,753	105,644	25,471	13,570	10,462

⁽¹⁾ See Note 1 of the notes to consolidated financial statements for a detailed explanation of the determination of the number of shares used to compute basic and diluted earnings per share.

In addition to the other information in this report, certain statements in the following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) are forward-looking statements. When used in this report, the word "expects," "anticipates," "estimates," and similar expressions are intended to identify forward-looking statements. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties are set forth below under "Factors Affecting Future Operating Results." The following discussion should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere in this report.

OVERVIEW

We manufacture and market service verification equipment to pre-qualify, verify, and diagnose telecommunications, cable, and Internet networks. We design our products to increase technicians' effectiveness in the field and to provide realistic network simulations for equipment manufacturers to test their products. Our customers include incumbent local exchange carriers, competitive local exchange carriers, other service providers, and network infrastructure suppliers and installers throughout North America, Latin America, Europe, Africa, the Middle East, and the Asia/Pacific region.

Sources of Net Sales

We sell our products predominantly to large telecommunications and cable TV service providers. These prospective customers generally commit significant resources to an evaluation of our and our competitors' products and require each vendor to expend substantial time, effort, and money educating the prospective customer about the value of the proposed solutions. Delays associated with potential customers' internal approval and contracting procedures, procurement practices, and testing and acceptance processes are common and may cause potential sales to be delayed or foregone. As a result of these and related factors, the sales cycle of new products for large customers typically ranges from six to twenty-four months. During the past year, we have observed a decline in capital spending in the telecommunications industry, which may lengthen the sales cycle further. Substantially all of our sales are made on the basis of purchase orders rather than long-term agreements or requirements contracts. As a result, we commit resources to the development and production of products without having received advance or long-term purchase commitments from customers.

Historically, a significant portion of our net sales has resulted from a small number of relatively large orders from a limited number of customers. In 2001 and 2000, we sold \$4.2 million and \$18.0 million, respectively, of our products to affiliates of SBC Communications, which represented 5% and 16%, respectively, of our net sales. In 2001, sales to SBC Communications affiliates decreased from the prior year primarily due to a decrease in capital spending, a slow down in the deployment of services, and acceptable levels of DSL test equipment on hand. As a percentage of sales, sales to SBC Communications affiliates have also decreased due to our expanding customer base and the diversification of our business. Additionally, in 2001 and 2000, \$6.3 million and \$19.6 million or 8% and 17%, respectively, of our sales were generated from our Copper Loop Test Head to Lucent Technologies or Solectron, a contract manufacturer for Lucent Technologies. Solectron integrated this product into the Stinger DSLAM that it manufactured for Lucent Technologies. The initial order from Lucent Technologies for the Cooper Loop Test Head was completed during the second quarter of 2001. Significant future orders of this Copper Loop Test Head product remains uncertain. No customers comprised more than 10% of our sales in 2001. We anticipate that our operating results for any given period will continue to be dependent to a significant extent on large purchase orders, which can be delayed or cancelled by our customers without penalty. In addition, we anticipate that our operating results for a given period will continue to be dependent on a small number of customers.

Currently, competition in the telecommunications and cable equipment market is intense and is characterized by declining prices due to increased competition and new products. Due to competition and potential pricing pressures from large customers in the future, we expect that the average selling price for our products will decline over time. If we fail to reduce our production costs accordingly, our gross margins will correspondingly decline. See "Factors Affecting Future Operating Results—Competition" and "—Risks of the Telecommunications Industry."

During the last three years, a substantial portion of our net sales have come from customers located outside of the United States, and we believe that growth may require expansion of our sales in international markets. Currently, we maintain a procurement support and manufacturing facility in Taipei, Taiwan; manufacturing, research, development, and sales facilities in Modena, Italy; and research, development, and sales facilities in Anjou, Canada. We also have a representative liaison office in Beijing, China, a foreign sales corporation in Barbados, and sales offices in Tokyo, Japan and Seoul, Korea.

Prior to our acquisition of Pro.Tel. S.r.l. ("Pro.Tel") in February 2000, international sales were denominated solely in U.S. dollars and, accordingly, we have not historically been exposed to fluctuations in non-U.S. currency exchange rates related to these sales activities. Since our acquisition of Pro.Tel in February 2000, and then Avantron in January 2001, we have had a small amount of sales denominated in Euros and the Canadian dollar and have at certain times used derivative financial instruments to hedge our foreign exchange risks. As of December 31, 2001, we had no derivative financial instruments. To date, foreign exchange exposure from sales has not been material to our operations. We have also been exposed to fluctuations in non-U.S. currency exchange rates related to our procurement activities in Taiwan. In the future, we expect that a growing portion of international sales may be denominated in currencies other than U.S. dollars, thereby exposing us to gains and losses on non-U.S. currency transactions. We may choose to limit such exposure by using hedging strategies. See "Factors Affecting Future Operating Results—Risks of International Operations."

We recognize product sales at the time of shipment unless we have future obligations or customer acceptance is required, in which case revenue is recognized when these obligations have been met or the customer accepts the product. We offer a three-year warranty covering parts and labor on our wire line access (including DSL) products and fiber optic products sold in the United States and generally offer a one-year warranty covering parts and labor for our products sold overseas, with a two-year extended warranty option at time of sale. Our cable TV and signaling products are covered by a one-year warranty. Revenue from sales of extended warranties is deferred and recognized over the extended warranty term, which is generally two years. We charge estimated warranty costs to cost of sales when the related sales are recognized. We recognize revenue for out-of-warranty repairs when we ship the repaired product.

Cost of Sales

Our cost of sales consist primarily of the following:

- direct material costs of product components, manuals, product documentation, and product accessories;
- production wages, taxes, and benefits;
- production allocated overhead costs;
- warranty costs;
- the costs of board level assembly by third party contract manufacturers; and
- scrapped material used in the production process.

We recognize direct cost of sales, wages, taxes, benefits, and allocated overhead costs as we ship product. We expense scrapped materials as incurred.

Our industry is characterized by limited supply chains and long lead times for the materials and components that we use in the manufacture of our products. If we underestimate our requirements, we may have inadequate inventory, resulting in additional product costs for expediting delivery of long lead time components. An increase in the cost of components could result in lower margins.

Additionally, these long lead times have in the past, and may in the future, cause us to purchase large quantities of some parts, increasing our investment in inventory and the risk of the parts' obsolescence. Any subsequent write-off of inventory could also result in lower margins. See "Factors Affecting Future Operating Results—Dependence on Sole and Single Source Suppliers."

Operating Costs

We classify our operating expenses into three general operational categories: selling and marketing, research and development, and general and administrative. Our operating expenses include stock-based compensation and amortization of goodwill and other intangible assets. We classify charges to the selling and marketing, research and development, and general and administrative expense categories based on the nature of the expenditures. Although each of these three categories includes expenses that are unique to the category type, there are commonly recurring expenditures that typically appear in all of these categories, such as salaries, amortization of stock-based compensation, employee benefits, travel and entertainment costs, allocated communication costs, rent and facilities costs, and third party professional service fees. The selling and marketing category of operating expenses also includes expenditures specific to the selling and marketing group, such as commissions, public relations and advertising, trade shows, and marketing materials.

We allocate the total cost of overhead and facilities to each of the functional areas that use overhead and facilities based upon the square footage of facilities used by each of these areas or the headcount in each of these areas. These allocated charges include facility rent and utilities for the corporate office, communications charges, and depreciation expenses for our building and for office furniture and equipment.

In 2001 and 2000, we recorded amortization of deferred stock-based compensation expense of \$2,125,000 and \$1,954,000, respectively, related to the grant of pre-IPO options to purchase our common stock at exercise prices subsequently determined to be below fair market value. Total compensation expense related to these options, which were granted in 1999 and the first quarter of 2000, will be amortized on a straight-line basis, over the four-year vesting periods of the options, to the departments of the employees who received these below market option grants. In 2001 and 2000, we allocated amortization of deferred stock-based compensation expense of \$291,000 and \$264,000, respectively, to cost of sales, \$815,000 and \$773,000, respectively, to research and development expense, \$648,000 and \$586,000, respectively, to selling and marketing expense and \$371,000 and \$331,000, respectively, to general and administrative expense. Also, we recorded amortization of goodwill and other intangible assets of \$5,064,000 and \$2,471,000, respectively, in general and administrative expense. At December 31, 2001, \$4,304,000 of deferred stock-based compensation remained to be amortized, at a rate not exceeding \$545,000 per quarter.

Acquisitions

In July 1999, we acquired Hukk Engineering ("Hukk"), a manufacturer of digital cable testing equipment. We accounted for the Hukk Engineering acquisition using the purchase method and, accordingly, recorded goodwill and other intangibles of approximately \$2.5 million to be amortized on a straight-line basis over the next five years until the end of 2001. At December 31, 2001, we had \$1.2 million (including work-force in place) in unamortized goodwill remaining from the Hukk Acquisition. We will periodically review this asset for impairment, as required by SFAS No. 142. In addition, we recorded deferred stock-based compensation for stock options granted to employees of Hukk during 1999, in the amount of \$2.1 million, to be amortized on a straight-line basis over their four-year vesting period

and non-compete amortization of \$0.5 million to be amortized on a straight-line basis over the next two to five years, based on the expected life of the underlying assets.

In February 2000, we acquired Pro.Tel. S.r.l. and subsidiaries ("Pro.Tel"), an Italian manufacturer of distributed network signaling analysis equipment, its U.S. affiliate, and the assets of an unrelated U.S. distributor. We accounted for this acquisition using the purchase method of accounting and, accordingly, recorded goodwill of \$8.9 million, to be amortized on a straight-line basis over its original estimated useful life of two to five years, until the end of 2001. At December 31, 2001, we had \$5.6 million (including work-force in place) in unamortized goodwill remaining from the Pro. Tel. acquisition. In accordance with SFAS No. 142, we will no longer amortize this goodwill, which will be periodically reviewed for impairment. In addition, we recorded deferred stock-based compensation for stock options granted to employees of Pro.Tel in the first quarter of 2000 in the amount of \$6.5 million, to be amortized on a straight-line basis over their four-year vesting periods and non-compete agreements of \$0.5 million, to be amortized on a straight-line basis over the next two to five years, based on the expected life of the underlying assets.

In January 2001, we acquired Avantron Technologies, Inc. ("Avantron"), a Canadian company that specializes in the design and manufacture of cable TV/modem spectrum analyzers and performance monitoring systems. The purchase price was \$11.9 million in cash and short-term notes payable. We accounted for this acquisition using the purchase method of accounting, and, accordingly, recorded goodwill of \$10.3 million, to be amortized on a straight-line basis over its original estimated useful life of two to five years, until the end of 2001. In accordance with SFAS No. 142, we will no longer amortize goodwill resulting from the Avantron acquisition. At December 31, 2001, we had \$8.2 million (including work-force in place) in unamortized goodwill remaining from the Avantron acquisition. We will periodically review this asset for impairment, as required by SFAS No. 142.

In February 2002, we acquired the CaLan Cable TV test business from Agilent Technologies, Inc. for approximately \$7.2 million in cash. CaLan products incorporate DigiSweep technology, the industry's fastest, high resolution, digital services-compatible sweep. CaLan products are designed to support a complete range of remote and field maintenance activities, from forward and return path alignment, to signal measurement and ingress troubleshooting.

We believe that acquisitions and joint ventures may be an important part of our growth and competitive strategy. "Factors Affecting Future Operating Results—Acquisitions."

Salary Reductions

In response to a slowdown in our customers' telecom spending patterns and softening demand for telecom equipment generally, we implemented a salary reduction throughout the Company ranging from 5% at the lowest paid employee level up to 25% at the founder executive management level. This reduction commenced during the second quarter of 2001. A salary freeze was also implemented along with this base salary reduction.

During the first quarter of 2002, the Company implemented additional reductions in workforce as well as additional salary adjustments. These salary adjustments in the first quarter of 2002 were as high as 25%. The overall cost savings of the workforce reductions and salary adjustments will average a 10% savings in payroll costs for the Company.

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, and we have prepared our discussion and analysis of our financial condition and results of operations based upon these financial statements. The preparation of these financial statements requires us to apply accounting policies using estimates and judgments that affect the reported amounts of assets, liabilities,

revenues, and expenses. We consider "critical" those accounting policies that meet both of the following criteria: They must require our most difficult, subjective, or complex judgments, which often result from a need to make estimates about the effect of matters that are inherently uncertain, and they must be among the most important of our accounting policies to the portrayal of its financial condition and results of operations. These critical accounting policies include determination of our allowance for doubtful accounts receivable, reserves for excess and obsolete inventory, reserves for future costs of meeting obligations under our standard product warranty agreements, deferred tax assets and liabilities, and the valuation of our minority interest investment in another company.

We determine our allowance for doubtful accounts receivable by making our best estimate considering our historical accounts receivable collection experience and the information that we have about the status of its accounts receivable balances. If future conditions cause our collection experience to change or if we later obtain different information about the status of any or all of our accounts receivable, additional allowances for doubtful accounts receivable may be required.

We determine our reserve for excess and obsolete inventory by making our best estimate considering the current quantities of inventory on hand and our forecast of the need for this inventory to support future sales of our products. We often have only limited information on which to base our forecasts, and if future sales differ from these forecasts, additional reserves for excess and obsolete inventory may be required.

We generally offer standard warranties on our products ranging from one to three years. At the time we recognize a product's sale, we determine the reserve for the future cost of meeting our obligations under these warranties by considering our historical experience with warranty costs. If the future costs of meeting these obligations differ from the historical experience, additional reserves for warranty obligations may be required.

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and for the future tax consequences attributable to operating loss and tax credit carryforwards. In assessing the recoverability of deferred tax assets, we consider whether it is more likely than not that some portion or that all of the deferred tax assets will be realized. The ultimate realization of certain deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. If we obtain information that causes our forecast of future taxable income to change or if actual future taxable income differs from our forecast, we may have to revise the carrying value of our deferred tax assets, which would affect our net income in the period in which the change was made. The ultimate realization of certain deferred tax assets is dependent on our ability to carry forward or back operating losses and tax credits. If changes in the tax laws occur that inhibit its ability to carry forward or back operating losses or tax credits, we will recognize the effect on our deferred tax assets in the results of operations of the period that includes the enactment date of the change. Furthermore, we measure our deferred tax assets and liabilities using the enacted tax laws expected to apply to taxable income in the years in which temporary differences are expected to be recovered or settled. If tax laws change, we will recognize the effect on its deferred tax assets and liabilities in the results of operations of the period that includes the enactment date of the change.

The preparation of our consolidated financial statements also requires us to apply accounting policies related to revenue recognition. We recognize revenue when earned. We recognize revenue from product sales upon shipment, based on the assumption that collectibility of the resulting receivable is reasonably assured. When the arrangement with the customer includes future obligations or is contingent on obtaining customer acceptance, we recognize revenue when those obligations have been met or customer acceptance has been received.

RESULTS OF OPERATIONS

The following table sets forth certain operating data as a percentage of net sales for the periods indicated:

	Percentage of Net Sales Year Ended December 31,		
	2001	2000	1999
Net sales	100.0%	100.0%	100.0%
Cost of sales	32.3	29.1	24.0
Gross profit	67.7	70.9	76.0
Operating expenses:			
Research and development	23.4	15.5	17.4
Selling and marketing	25.7	20.0	24.7
General and administrative	<u>17.4</u>	8.6	6.4
Total operating expenses	66.5	44.1	48.5
Income from operations	1.2	26.8	27.5
Other income, net	3.3	1.7	0.5
Income before income taxes	4.5	28.5	28.0
Income taxes	0.9	10.5	10.2
Net income	3.6%	18.0%	17.8%

COMPARISON OF YEARS ENDED DECEMBER 31, 2001 AND 2000

Net Sales. Net sales decreased \$34.4 million, or 30%, to \$79.1 million in 2001 from \$113.5 million in 2000. Sales of our wire line access products, including DSL products, accounted for \$41.7 million of the net sales decrease and sales of our signaling products accounted for \$0.5 million of the net sales decrease. These decreases were offset by an increase of \$6.9 million in sales of our cable TV products and an increase of \$0.9 million in sales of our fiber optics products. Of the \$6.9 million cable TV products sales increase, \$5.7 million came from sales by our Avantron subsidiary, which we acquired in 2001, and \$1.2 million came from increased sales of our existing product lines.

Sales in 2001 as compared to 2000 decreased \$35.9 million, or 41%, in North America, increased \$0.8 million, or 8%, in Europe/Africa/Middle East, increased \$1.4 million, or 14%, in Asia Pacific, and decreased \$0.7 million, or 17%, in Latin America.

The decrease in North American sales from 2000 to 2001 is due to lower sales of our wire line access products, including DSL, and lower sales of our protocol and fiber optics products. Our wire line access product sales decreased \$37.1 million in North America from 2000 to 2001. Of this decrease, \$13.2 million was from reduced Copper Loop Test Head sales for Lucent Technologies' stinger DSLAM product, which decreased from \$19.6 million in 2000 to \$6.3 million in 2001. Significant future orders of the Copper Loop Test Head product remains uncertain. North American sales of our protocol products decreased \$2.0 million and our fiber optics products decreased \$2.0 million from 2000 to 2001. The decreases in our North American sales were primarily the result of decreased capital spending by our telecommunications customers. In addition, over the past year some DSL providers have encouraged customer self-installation and have reported that up to 90% of their customers perform self-installation. If the self-installation procedure reduces the need for technicians to test for DSL service, demand for our DSL wire line access products may decline further as our equipment may be used primarily for troubleshooting rather than installation. Sales of our cable TV products increased by \$5.3 million in North America from 2000 to 2001. Of this increase, \$4.1 million came from our existing product lines.

International sales, including North American sales to Canada, decreased to \$29.7 million, or 38% of net sales, in 2001 from \$30.1 million, or 27% of net sales, in 2000. The decrease in international sales is primarily due to decreased sales of our wire line access product lines, including DSL, which were partially offset by increased sales of our fiber optics products.

Cost of Sales. Cost of sales consists primarily of direct material, warranty, and personnel costs related to the manufacturing of our products and allocated overhead. Cost of sales decreased 23% to \$25.5 million in 2001 from \$33.0 million in 2000. This decrease is primarily due to the decrease in net sales from 2000 to 2001. Cost of sales were 32% of net sales in 2001 versus 29% of net sales in 2000. The increase as a percentage of net sales resulted primarily from an increased presence in our sales mix of cable TV products, lower margin wire line access products, and international sales, which tend to carry lower margins than North American sales because they often go through distributor networks. We expect that cost of sales may continue to increase as a percentage of sales for the foreseeable future as our light chassis DSL products and cable TV products increase as a percentage of our overall product mix, if international sales continue to grow as a percentage of total sales, or if pricing pressures increase.

Research and Development. Research and development expenses consist primarily of the costs of payroll and benefits for engineers, equipment, and consulting services. Research and development expenses increased 5% to \$18.5 million in 2001 from \$17.6 million in 2000. This increase is primarily due to costs associated with increased staffing dedicated to research and development activities. Research and development expenses were 23% of net sales in 2001 and 15% of net sales in 2000. The increase as a percentage of net sales in 2001 is primarily due to decreased product sales while research and development expenditures increased, as we continue to invest in product development and expansion of our product lines. Research and development expenses may increase in absolute dollars as we continue to invest in product development and expand our product lines.

Selling and Marketing. Selling and marketing expenses consist primarily of the costs of payroll and benefits for selling and marketing personnel, manufacturers' representatives and direct sales commissions, travel and facilities expenses related to selling and marketing, and trade show and advertising expenses. Selling and marketing expenses decreased 10% to \$20.3 million in 2001 from \$22.7 million in 2000. This decrease is primarily due to a 49% decrease in commissions expense. Commission expense decreased primarily due to the decrease in our sales, particularly North American sales, for which we make the preponderance of our commission payments. Selling and marketing expenses were 26% of net sales in 2001 and 20% of net sales in 2000. The increase as a percentage of net sales in 2001 is primarily due to decreased OEM sales, which led to lower commission, occupancy, and salary and related expenses as a percentage of sales than in 2000. Selling and marketing expenses may increase in absolute dollars as we continue to invest in our selling and marketing capabilities.

General and Administrative. General and administrative expenses consist primarily of payroll and benefits, facilities, other costs of our finance and administrative departments, legal and accounting expenses, and amortization expenses for goodwill and other intangible assets related to our business acquisitions. General and administrative expenses increased 41% to \$13.8 million in 2001 from \$9.8 million in 2000. General and administrative expenses were 17% of net sales in 2001 and 9% of net sales in 2000. The increase in both absolute dollars and as a percentage of net sales is primarily due to increased amortization of goodwill and other intangible assets related to recent business acquisitions, amortization of deferred stock-based compensation, and increased staffing and related costs associated with the growth of our business as a public company for the full year of 2001. General and administrative expenses may increase in absolute dollars to accommodate the growth of our business, to add related infrastructure, and to pursue our acquisition strategy.

Other Income, Net. Other income, net represents primarily interest earned on cash and investment balances net of interest expense on notes payable and short-term borrowings under our line of credit. Other income, net increased

to \$2.6 million in 2001 from \$1.9 million in 2000. The increase in 2001 resulted primarily from increased interest earned on higher balances of cash and cash equivalents resulting from increased cash flow from operations, interest income earned for a full year in 2001 on the net proceeds received from our initial public offering in July 2000, and income earned from a grant from the Italian government.

Income Taxes. Income taxes consist of federal, state, and international income taxes. We recorded income tax expense of \$0.7 million in 2001 and \$12.0 million in 2000. Our effective income tax rates were 20% in 2001 and 37% in 2000. Our income tax expense and effective income tax rate are lower in 2001 than in 2000 primarily due to lower levels of income.

COMPARISON OF YEARS ENDED DECEMBER 31, 2000 AND 1999

Net Sales. Net sales increased approximately 85% to \$113.5 million in 2000 from \$61.5 million in 1999. Sales of our wire line access products, including DSL products, accounted for \$30.4 million of the net sales increase, our new fiber optics products accounted for \$14.0 million of the net sales increase, our new signaling products accounted for \$4.7 million of the net sales increase, and our cable TV products accounted for \$2.9 million of the net sales increase over the prior year.

Sales in 2000 as compared to 1999 increased \$38.2 million, or 76%, in North America, \$6.0 million, or 138%, in Europe, \$4.5 million, or 80%, in Asia and \$3.3 million, or 275%, in Latin America. The strong increase in North American sales is primarily due to sales of our DSL and fiber optic products. Our DSL products accounted for \$19.7 million of the increase in North American sales for the year in part due to sales of our new customized Copper Loop Test Head for Lucent Technologies' Stinger DSLAM, which totaled \$19.6 million or 17% of net sales for 2000. Sales of our new fiber optics products accounted for \$11.8 million of the increase in North American sales for the year. Our new signaling products accounted for \$3.8 million of the increase in North American sales for the year, and sales of our cable TV products accounted for \$2.9 million of the increase in North American sales for the year.

International sales, including North American sales to Canada, increased to \$30.1 million, or 27% of net sales, in 2000 from \$12.2 million, or 20% of net sales, in 1999. The increase in international sales is primarily due to increased sales of our DSL product line and our expanded international operations.

Cost of Sales. Cost of sales increased 124% to \$33.0 million in 2000 from \$14.7 million in 1999. Cost of sales represented 29% of net sales in 2000 and 24% of net sales in 1999. The increase as a percentage of net sales resulted primarily from a higher sales volume of light chassis DSL products, which have lower average selling prices than full chassis DSL products and the introduction of our new fiber optics and cable TV product lines which generated lower gross margins than the mix of products sold during the prior year.

Research and Development. Research and development expenses increased 64% to \$17.6 million in 2000 from \$10.7 million in 1999. This increase is primarily due to costs associated with increased staffing dedicated to research and development activities. Research and development expenses represented 15% of net sales during 2000 and 17% of net sales in 1999. The decrease as a percentage of net sales in 2000 was primarily attributable to increased product sales relative to research and development expenditures.

Selling and Marketing. Selling and marketing expenses increased 49% to \$22.7 million in 2000 from \$15.2 million in 1999. This increase is primarily due to increased staffing to support expanded product offerings and increased marketing and promotional activities. Selling and marketing expenses represented 20% of net sales in 2000 and 25% of net sales in 1999. The decrease as a percentage of net sales during 2000 was primarily due to increased OEM sales, which have led to lower commission, occupancy, and salary and related expenses as a percentage of sales.

General and Administrative. General and administrative expenses increased 150% to \$9.8 million in 2000 from \$3.9 million in 1999. General and administrative expenses represented 9% of net sales in 2000 and 6% in 1999. The increase in both absolute dollars and as a percentage of net sales was primarily related to increased staffing and related costs associated with the growth of our business, amortization of goodwill and other intangible assets related to recent business acquisitions, and amortization of deferred stock-based compensation.

Other Income, Net. In 2000, we also recorded a \$0.4 million gain on a forward contract. Other income, net increased to \$1.9 million in 2000 from \$0.3 million in 2000. The increase in 2000 resulted primarily from increased interest earned on higher balances of cash and cash equivalents resulting from increased cash flow from operations, a gain on a forward contract, and interest income earned on the net proceeds received from our initial public offering in July 2000.

Income Taxes. We recorded income tax expense of \$12.0 million in 2000 and \$6.3 million in 1999. Our effective income tax rates were 37% in 2000 and 32% in 1999. The effective income tax rate is higher in 2000 than in 1999 primarily due to higher levels of income, charges from non-cash amortization of goodwill and deferred stock-based compensation, and an increased concentration of sales in local jurisdictions with higher tax rates.

BACKLOG

Our backlog of customer orders at December 31, 2001 was approximately \$1.5 million compared to approximately \$8.0 million at December 31, 2000. Variations in the size and delivery schedules of purchase orders that we receive, as well as changes in customers' delivery requirements may result in substantial fluctuations in the amount of backlog orders for our products from quarter to quarter.

SEASONALITY

Our sales have been seasonal in nature and tied to the buying patterns of our customers. Prior to 2000, the largest quarterly sales had usually been during the last calendar quarter of the year, as customers spent the unused portions of their annual budgets. In 2001 and 2000, there was a change in this fourth quarter seasonality with no significant remaining unused budget dollars available for an increase in the fourth quarter seasonal sales. Prior to 2001, the first quarter of any given year had historically been a light period of orders due to the delayed release mid first quarter of the current year's budget. We expect that our quarterly operating results may fluctuate significantly and will be difficult to predict given the nature of our business. Many factors could cause our operating results to fluctuate from quarter to quarter in the future, including the lengthy and unpredictable buying patterns of our customers, the degree to which our customers allocate and spend their yearly budgets, and the timing of our customers' budget processes.

LIQUIDITY AND CAPITAL RESOURCES

Historically, we have financed our operations and satisfied our capital expenditure requirements primarily through cash flow from operations and borrowings under our line of credit. Additionally, in July of 2000, we received net proceeds totaling \$51.6 million from our initial public offering. As of December 31, 2001 and 2000, we had working capital of \$64.9 million and \$82.0 million, respectively, and cash and cash equivalents of \$48.7 million and \$56.3 million, respectively. As of December 31, 2001 and 2000, we also had \$3.5 million and \$6.3 million, respectively, in investments in marketable securities.

Cash provided by operating activities was \$19.8 million in 2001, \$13.4 million in 2000, and \$10.1 million in 1999. Operating cash flows increased during 2001 as compared to 2000 primarily as a result of net collections of accounts receivable and a net reduction in inventory purchases. Also, the amount of non-cash charges against net income increased significantly in 2001 from 2000. This was primarily the result of increased goodwill amortization from the

acquisition of Avantron Technologies, Inc. in the first quarter of 2001 and increased depreciation resulting from the completion of our new corporate headquarters building in San Jose, CA, also in the first quarter of 2001. Therefore, the decline in the net income from 2000 to 2001 was not associated with a proportional decline in operating cash flow. The factors increasing operating cash flow were partially offset by decreases in accounts payable and accrued expenses and income taxes payable.

Cash used in investing activities was \$27.8 million in 2001, \$16.9 million in 2000, and \$6.2 million in 1999. In 2001, cash used in investing activities included \$11.3 million for acquisitions, \$19.6 million for purchases of marketable securities, and \$19.4 million for capital expenditures. This was offset by \$22.5 million generated from the sale of marketable securities. Cash used for capital expenditures increased during 2001 over 2000 primarily due to the completion of our new facility in San Jose, California. Cash outlays for the facility during 2001 were \$8.8 million for the land and \$5.6 million for construction. Cash used for capital expenditures during 2001 also included research and development laboratory equipment, general office equipment to support the new facility, and demonstration equipment to support our selling and marketing programs. In 2000, cash used in investing activities included \$4.7 million for acquisitions, \$6.3 million for purchases of marketable securities, \$5.6 million for capital expenditures, and \$0.2 million for the purchase of a long-term investment.

Cash provided by financing activities was \$0.6 million in 2001 and \$51.3 million in 2000, and cash used in financing activities was \$0.3 million in 1999. In 2001, cash provided by financing activities was net proceeds of \$1.3 million from common stock issued pursuant to our employee stock purchase plan, \$0.6 million from notes payable, and \$0.4 million from stock options exercised. This was offset by \$0.9 million repurchase common stock, \$0.6 million to repay notes payable, and \$0.2 million to repay short-term borrowings. In 2000, cash provided by financing activities was primarily net proceeds of \$51.6 million from our initial public offering in July 2000, net proceeds of \$0.5 million received from stock issued pursuant to our employee stock purchase plan, and \$0.8 million received from the exercise of stock options. These were partially offset by \$1.6 million used for repayments of notes payable.

Currently, we have a line of credit from Bank of America, N.A. for up to \$9.0 million in borrowings at the bank's prime rate less 0.25% (4.50% at December 31, 2001). The line of credit expires on August 1, 2002. At December 31, 2001 and 2000, there were no balances outstanding under the line of credit. Borrowings under the line of credit are secured by our inventory and accounts receivable. The agreement governing the line of credit contains covenants, with which we were in compliance at December 31, 2001 and 2000, that, among other things:

- require us to maintain various financial covenants, including profitability and current ratios;
- limit capital expenditures;
- restrict the payment of dividends on our common stock to dividends payable in common stock and to \$1.0 million payable in any one fiscal year; and
- · restrict our ability to redeem our common stock beyond 20% of our net income for the prior fiscal year.

We also have credit facilities from various Italian financial institutions with limits ranging from \$0.2 million up to \$1.0 million, which bear interest at variable rates ranging from 6.675% to 9.6875% at December 31, 2001, based on the ABI prime rate. At December 31, 2001 \$56,000 had been drawn down under these facilities.

The remaining borrowings consist of a loan from the Italian government, which bears interest at 2% a year. At December 31, 2001, the outstanding balance on this loan was \$0.6 million. Interest payments are to be paid starting in 2002 and principal payments in 2004.

We believe that the net proceeds received by us from our initial public offering, together with current cash balances, cash flows from operations and available borrowings under our line of credit will be sufficient to meet our

anticipated cash needs for working capital, capital expenditures, acquisitions, and other activities for at least the next 12 months. After that, if current sources are not sufficient to meet our needs, we may seek additional equity or debt financing. In addition, any material acquisition of complementary businesses, products or technologies, or material joint ventures could require us to obtain additional equity or debt financing. We cannot assure you that such additional financing would be available on acceptable terms, if at all.

FACTORS AFFECTING FUTURE OPERATING RESULTS

Quarterly Fluctuations—Because our quarterly operating results have fluctuated significantly in the past and are likely to fluctuate significantly in the future, our stock price may decline and may be volatile.

In the past, we have experienced significant fluctuations in our quarterly results due to a number of factors beyond our control. In the future, our quarterly operating results may fluctuate significantly and may be difficult to predict given the nature of our business. Many factors could cause our operating results to fluctuate from quarter to quarter in the future, including the following:

- the size and timing of orders from our customers, which may be exacerbated by the increased length and unpredictability of our customers' buying patterns, and our ability to ship these orders on a timely basis;
- the degree to which our customers have allocated and spent their yearly budgets;
- the uneven pace of technological innovation, the development of products responding to these technological innovations by us and our competitors, and customer acceptance of these products and innovations;
- the varied degree of price, product, technology competition, and our customers' and competitors' responses to these changes;
- the relative percentages of our products sold domestically and internationally;
- the mix of the products we sell and the varied margins associated with these products; and
- the timing of our customers' budget processes.

The factors listed above may affect our business and stock price in several ways. Given the high fixed costs related to overhead, research and development, and advertising and marketing, among others, if our net sales are below our expectations in any quarter, we may not be able to adjust spending accordingly. As a result of the above, our stock price may decline and may be volatile, particularly if public market analysts and investors perceive these factors to exist, whether or not that perception is accurate. Furthermore, the above factors, taken together may make it more difficult for us to issue additional equity in the future or raise debt financing to fund future acquisitions and accelerate growth.

These risks may be exacerbated by, or may be in addition to, the risk of a general economic slowdown that affects the economy as a whole or the telecommunications industry in particular.

Dependence on DSL—The majority of our sales have been from our DSL products. Demand for our DSL products has recently declined and may decline further.

In fiscal 2001 and 2000, sales of our DSL and other wire line access products represented approximately 62% and 80% of our net sales, respectively. Currently, our DSL products are primarily used by a limited number of incumbent local exchange carriers, including the regional Bell operating companies, and competitive local exchange carriers who offer DSL services. A competitive local exchange carrier is a company that, following the Telecommunications Act of 1996, is authorized to compete in a local communications services market. These parties, and other Internet service providers and users, are continuously evaluating alternative high-speed data access technologies, including cable modems, fiber optics, wireless technology, and satellite technologies, and may at any time adopt these competing

technologies. These competing technologies may ultimately prove to be superior to DSL services and reduce or eliminate the demand for our DSL products.

In addition, the availability and quality of DSL service may be impaired by technical limitations and problems of the existing copper wire network on which DSL service runs, such as:

- the distance of end users from the central office of the incumbent local exchange carrier, which is typically limited to between 12,000 and 18,000 feet:
- the quality and degree of interference within the copper wire network;
- the configuration of the copper wire network, which may degrade or prevent DSL service;
- the ability of DSL networks and operational support systems of service providers to connect and manage a substantial number of online end users at high speeds, while achieving reliable and high quality service; and
- the vulnerability of the copper wire network to physical damage from natural disasters and other unanticipated telecommunications failures and problems.

During 2001, the business prospects of many competitive local exchange carriers declined significantly. Some competitive local exchange carriers filed for bankruptcy or went out of business. Due to these and other factors, we have seen a decline in DSL deployment and a significant decline in demand for our DSL products. If DSL deployment rates continue to decrease or remain flat, demand for our DSL products may decline further. It is not possible to predict whether any decline would be temporary or sustained. Accordingly, our future success is partially dependent upon whether DSL technology continues to gain growing and widespread market acceptance by exchange carriers, end users of their services, and other Internet service providers and users.

In the past, our customers have deployed DSL equipment, including our products, in substantially larger volumes than their subscriber count. Over the past year to eighteen months, some of our customers have leveled or decreased the rate at which they deploy DSL equipment. This decrease has lead to a decrease in demand for our products. In addition, the inability of our current or future customers to acquire and to retain subscribers as planned, or to respond to competition for their services or reduced demand for their services, could cause them to further reduce or to eliminate entirely their DSL deployment plans.

Risks of the Telecommunications Industry—We face several risks regarding the telecommunications industry, including the possible effects of its unpredictable growth or decline, the possible effects of consolidation among our principal customers, and the risk that deregulation will slow.

Since the passage of the Telecommunications Act of 1996, the telecommunications industry has experienced rapid growth. The growth has led to great innovations in technology, intense competition, short product life cycles, and, to some extent, regulatory uncertainty inside and outside the United States. The course of the development of the telecommunications industry is, however, difficult to predict. Companies operating in this industry have a difficult time forecasting future trends and developments and forecasting customer acceptance of competing technologies. One possible effect of this uncertainty is that there is, and may continue to be, a delay or a reduction in these companies' investment in their business and purchase of related equipment, such as our products, and a reduction in their and our access to capital. In addition, deregulation may result in a delay or a reduction in the procurement cycle because of the general uncertainty involved with the transition period of businesses.

The growth that has occurred since the passage of the Telecommunications Act of 1996 has slowed, and it is unknown whether or when it will resume. This slowdown includes reduced investment in the telecommunications industry in general and delayed purchase orders for service verification equipment such as our products in particular. It is not possible to predict whether this slowdown will be temporary, or sustained.

In addition, the telecommunications industry has been experiencing consolidation among its primary participants, such as incumbent local exchange carriers and competitive local exchange carriers, several of whom are our primary customers. For example, in recent years, GTE merged with Bell Atlantic to create Verizon Communications, Inc., both of which were customers of ours. Continued consolidation may cause delay or cancellation of orders for our products. The consolidation of our customers will likely provide them with greater negotiating leverage with us and may lead them to pressure us to lower the prices of our products.

If deregulation in international markets or in the United States were to slow or to take an unanticipated course, the telecommunications industry might suffer, among other effects, the following:

- a continued general slowdown in economic activity relating to the telecommunications industry and a consequent multiplier effect on the general economy;
- continued reduced investment in the telecommunications industry in general, and in DSL technology in particular, due to increased uncertainty regarding the future of the industry and this technology;
- greater consolidation of providers of high-speed access technologies, which may not favor the development of DSL technology and which might provide these companies with greater negotiating leverage regarding the prices and other terms of the DSL products and services they purchase;
- uncertainty regarding judicial and administrative proceedings, which may affect the pace at which investment and deregulation continue to occur; and
- continued delay in purchase orders of service verification equipment, such as our products, if customers were to reduce their investment in new high-speed access technologies.

Customer Concentration—A limited number of customers account for a high percentage of our net sales, and any adverse factor affecting these customers or our relationship with these customers could cause our net sales to decrease.

Our customer base is concentrated, and a relatively small number of companies have accounted for a large percentage of our net sales. Net sales from our top five customers in the United States represented approximately 23% in 2001, 42% in 2000, and 49% in 1999. Our largest customers over this period have been affiliates of SBC Communications Inc., which include Pacific Bell Telephone Company, Southwestern Bell Telephone Company, Ameritech Corporation, Nevada Bell, Advanced Solutions, Inc., and Southern New England Telephone and which in total accounted for less than 6% of net sales in fiscal 2001, and approximately 16% in fiscal 2000. Additionally, sales to both Lucent Technologies and Solectron, a contract manufacturer for Lucent Technologies' Stinger DSLAM products, represented approximately 8% of sales in 2001 and 17% in 2000. As of the end of the second quarter of 2001, our initial contract orders from Lucent Technologies for the Copper Loop Test Head came to a negotiated completion.In general, our customers are not obligated to purchase a specific amount of products or to provide us with binding forecasts of purchases for any period.

As a result of the general slowdown in the United States economy, our net sales declined significantly in 2001 and we anticipate that future sales may continue to decline from our fiscal 2001 net sales. Our future sales to Lucent Technologies and Solectron may be immaterial. Sales of our DSL related equipment, in particular, have declined and may continue to decline further in 2002 compared to 2001. The loss of a major customer or the reduction, delay, or cancellation of orders from one or more of our significant customers could cause our net sales and, therefore, profits to decline. In addition, many of our customers are able to exert substantial negotiating leverage over us. As a result, they may cause us to lower our prices and to negotiate other terms and provisions that may negatively affect our business and profits.

Use of Field Technicians—If service providers reduce their use of field technicians and continue successful implementation of a self-service installation model, demand for our products could decrease.

To ensure quality service, our major service provider customers have historically sent a technician, who uses our products, into the field to verify service for installations. SBC Communications, Qwest Communications, Bell South Corporation, and Verizon Communications each encourage their customers to install DSL themselves. Over the past year, some DSL providers have reported that up to 90% of their customers perform self-installation. Additionally, AT&T has begun a self- installation program for cable modem devices. By encouraging customers to install DSL and cable access themselves, these companies intend to reduce their expenses and expedite installation for their customers. To encourage self-installation, these companies offer financial incentives. If service providers continue successful implementation of these plans or choose to send technicians into the field only after a problem has been reported, or if alternative methods of verification become available, such as remote verification, the need for field technicians and the need for our products would decrease.

Product Development—If we are unable to enhance our existing products and to manage successfully the development of new products, our future success may be threatened.

The market for our products is characterized by rapid technological advances, changes in customer requirements and preferences, evolving industry and customer-specific protocol standards, and frequent new product enhancements and introductions. Our existing products and our products currently under development could be rendered obsolete by the introduction of products involving competing technologies, by the evolution of alternative technologies or new industry protocol standards, or by rival products by our competitors. These market conditions are more complex and challenging because of the introduction of the high degree to which the telecommunications industry is fragmented.

We believe our future success will depend, in part, upon our ability, on a timely and cost-effective basis, to continue to do the following:

- anticipate and respond to varied and rapidly changing customer preferences and requirements, a process made more challenging by our customers' buying patterns;
- anticipate and develop new products and solutions for networks based on emerging technologies, such as the
 asynchronous transfer mode protocol that packs digital information into cells to be routed across a network,
 and Internet telephony, which comprises voice, video, image, and data across the Internet, that are likely to be
 characterized by continuing technological developments, evolving industry standards, and changing customer
 requirements;
- invest in research and development to enhance our existing products and to introduce new verification and diagnostic products for the telecommunications, Internet, cable network, and other markets; and
- support our products by investing in effective advertising, marketing, and customer support.

We cannot ensure that we will accomplish these objectives, and our failure to do so could have a material adverse impact on our market share, business and financial results.

Sales implementation Cycles—The length and unpredictability of the sales and implementation cycles for our products makes it difficult to forecast revenues.

Sales of our products often entail an extended decision-making process on the part of prospective customers. We frequently experience delays following initial contact with a prospective customer and expend substantial funds and management effort pursuing these sales. Our ability to forecast the timing and amount of specific sales is therefore limited. As a result, the uneven buying patterns of our customers may cause fluctuations in our operating results, which could cause our stock price to decline.

Other sources of delays that lead to long sales cycles, or even a sales loss, include current and potential customers' internal budgeting procedures, internal approval and contracting procedures, procurement practices, and testing and acceptance processes. Recently, our customers' budgeting procedures have lengthened. The sales cycle for larger deployment now typically ranges from six to twenty-four months and up to six or more months. The deferral or loss of one or more significant sales could significantly affect operating results in a particular quarter, especially if there are significant selling and marketing expenses associated with the deferred or lost sales.

Electrical Blackouts in California—Possible shutdowns in our manufacturing operations could occur.

Beginning in 2000 and continuing into 2001, California experienced restricted supplies of electrical power. These restricted supplies resulted in blackouts and higher electricity costs. Since we do not have back up generators, should we experience blackouts, our business will be negatively affected by slowed production, slowed research and development, slowed marketing, slowed sales efforts, and a general loss of productivity. In addition, increased electrical rates will increase our costs and lower our margins.

Managing Growth and Slowdowns—We may have difficulty managing our expansions and contractions in operations, which could reduce our chances of maintaining our profitability.

We experienced rapid growth in revenues and in our business in 2000 and 1999 followed by a significant slowdown in 2001 that has placed, and may continue to place, a significant strain on our management and operations. For example, our revenues increased from \$113.5 million in 2000 from \$61.5 million in 1999. Yet revenues have slowed to \$79.1 million in 2001, and our number of employees has increased to 390 at December 31, 2001 from 169 at December 31, 1999. To date, we have acquired four significant companies or lines of business, Hukk Engineering in July 1999, Pro.Tel. S.r.l. and subsidiaries in February 2000, Avantron Technologies, Inc. in January 2001, and the CaLan cable TV test business from Agilent Technologies, Inc. in February 2002. As a result of our historical growth and future growth, or slowdowns, we face several risks, including the following:

- the need to improve our operational, financial, management, informational, and control systems;
- the need to hire, train, and retain highly skilled personnel in a market in which there may be severe shortages of these kinds of personnel, as we discuss below;
- the possibility that our management's attention will be diverted from running our business to the needs of managing a public company; and
- the challenge to manage expense reductions as rapidly as revenue slowdowns without impacting development strategies.

We cannot ensure that we will be able to manage growth or slowdowns profitably.

Acquisitions—We have acquired three significant companies, one business line, and intend to pursue further acquisitions in the future. These activities involve numerous risks, including the use of cash, amortization of goodwill, and the diversion of management attention.

As discussed in the previous section, we have acquired four significant companies or lines of business to date, Hukk Engineering, Pro.Tel. S.r.l., and Avantron Technologies, Inc., and the CaLan Cable TV test business line from Agilent Technologies, Inc. As a result of these and other smaller acquisitions, we face numerous risks, including the following:

 integrating the existing management, sales force, technicians, and other personnel into one culture and business:

- integrating manufacturing, administrative, and management information and other control systems into our existing systems;
- developing and implementing an integrated business strategy over what had previously been three independent companies; and
- developing compatible or complementary products and technologies from previously independent operations.

The risks stated above will be made more difficult because Hukk Engineering is located in Norcross, Georgia; Avantron is located in Anjou, Canada; and Pro.Tel is located in Modena, Italy. In addition, if we make future acquisitions, these risks will be exacerbated by the need to integrate additional operations at a time when we may not have fully integrated all of our previous acquisitions.

If we pursue further acquisitions, we will face similar risks as those above and additional risks, including the following:

- the diversion of our management's attention and the expense of identifying and pursuing suitable acquisition candidates, whether or not consummated;
- negotiating and closing these transactions;
- the potential need to fund these acquisitions by dilutive issuances of equity securities and by incurring debt;
- the potential negative effect on our financial statements from the increase in goodwill and other intangibles, the write-off of research and development costs, and the high cost and expenses of completing acquisitions.

We cannot ensure that we will locate suitable acquisition candidates or that, if we do, we will be able to acquire them and then integrate them successfully and efficiently into our business.

Competition—Competition could reduce our market share and decrease our net sales.

The market for our products is fragmented and intensely competitive, both inside and outside the United States, and is subject to rapid technological change, evolving industry standards, regulatory developments, and varied and changing customer preferences and requirements. We compete with a number of United States and international suppliers that vary in size and in the scope and breadth of the products and services offered. The following table sets forth our principal competitors in each of our product categories.

Product Category	Principal Competitors
Wire Line Access	Acterna Corporation; Agilent Technologies, Inc.
Fiber Optics SONET/SDH	Digital Lightwave, Inc.; Acterna Corporation; Agilent Technologies, Inc.
Cable TV	Acterna Corporation; Agilent Technologies, Inc.
Signaling	Inet Technologies, Inc.; GN Nettest

Many of these competitors have longer operating histories, larger installed customer bases, longer relationships with customers, wider name recognition and product offerings, and greater financial, technical, marketing, customer service, and other resources than we have.

We expect that, as our industry and markets evolve, new competitors or alliances among competitors with existing and new technologies may emerge and acquire significant market share. We anticipate that competition in our markets will increase, and we will face greater threats to our market share, price pressure on our products, and the likelihood that, over time, our profitability may decrease. Over the past year, we have recorded lower revenue and gross margins. In addition, it is difficult to assess accurately the market share of our products or of Sunrise overall because of the high

degree of fragmentation in the market for DSL service verification equipment, in particular, and for high-speed data access technology, in general. As a result, it may be difficult for us to forecast accurately trends in the markets, which of our products will be the most competitive over the longer term, and therefore, what is the best use of our human and other forms of capital. We cannot ensure that we will be able to compete effectively.

Dependence on Key Employees—If one or more of our senior managers were to leave, we could experience difficulties in replacing them and our operating results could suffer.

Our success depends to a significant extent upon the continued service and performance of a relatively small number of key senior management, technical, sales, and marketing personnel. In particular, the loss of either of two of our founders, Paul Ker-Chin Chang and Paul A. Marshall, would likely harm our business. Neither of these individuals is bound by an employment agreement with us, and we do not carry key man life insurance on them. In addition, competition for senior level personnel with telecommunications knowledge and experience is intense. If any of our senior managers were to leave Sunrise, we would need to devote substantial resources and management attention to replace them. As a result, management attention may be diverted from managing our business, and we may need to pay higher compensation to replace these employees.

Dependence on Sole and Single Source Suppliers—Because we depend on a limited number of suppliers and some sole and single source suppliers that are not contractually bound in the long-term, our future supply of parts is uncertain.

We purchase many key products, such as microprocessors, field programmable gate arrays, bus interface chips, optical components, and oscillators, from a single source or sole suppliers, and we license certain software from third parties. We rely exclusively on third-party subcontractors to manufacture some sub-assemblies, and we have retained, from time to time, third party design services in the development of our products. We do not have long-term supply agreements with these vendors. In general, we make advance purchases of some products and components to ensure an adequate supply, particularly for products that require lead times of up to nine months to manufacture. In the past, we have experienced supply problems as a result of financial or operational difficulties of our suppliers, shortages, and discontinuations resulting from component obsolescence or other shortages or allocations by suppliers. Our reliance on these third parties involves a number of risks, including the following:

- the unavailability of critical products and components on a timely basis, on commercially reasonable terms, or at all;
- the unavailability of products or software licenses, resulting in the need to qualify new or alternative products or develop or license new software for our use and/or to reconfigure our products and manufacturing process, each of which could be lengthy and expensive;
- the likelihood that, if these products are not available, we would suffer an interruption in the manufacture and shipment of our products until the products or alternatives become available;
- reduced control over product quality and cost, risks that are exacerbated by the need to respond, at times, to unanticipated changes and increases in customer orders; and
- the unavailability of, or interruption in, access to some process technologies.

In addition, the purchase of these components on a sole source basis subjects us to risks of price increases and potential quality assurance problems. This dependence magnifies the risk that we may not be able to ship our products on a timely basis to satisfy customers' orders. We cannot ensure that one or more of these factors will not cause delays or reductions in product shipments or increases in product costs, which in turn could have a material adverse effect on our business.

Risks of International Operations—Our plan to expand sales in international markets could lead to higher operating expenses and may subject us to unpredictable regulatory and political systems.

Sales to customers located outside of the United States represented 38% of our net sales in 2001, 27% in 2000, and 20% in 1999, and we expect international revenues to continue to account for a significant percentage of net sales for the foreseeable future. In addition, an important part of our strategy calls for further expansion into international markets. As a result, we will face various risks relating to our international operations, including the following:

- potentially higher operating expenses, resulting from the establishment of international offices, the hiring of additional personnel, and the localization and marketing of products for particular countries' technologies;
- the need to establish relationships with government-owned or subsidized telecommunications providers and with additional distributors;
- fluctuations in foreign currency exchange rates and the risks of using hedging strategies to minimize our
 exposure to these fluctuations, which have been heightened by our acquisition of Pro.Tel and Avantron, whose
 revenues have been and are likely to continue to be in Euros and Canadian dollars, respectively; and
- potentially adverse tax consequences related to acquisitions and operations, including the ability to claim goodwill deductions and a foreign tax credit against U.S. federal income taxes, especially since Italy has a higher tax rate.

We cannot ensure that one or more of these factors will not materially and adversely affect our ability to expand into international markets or our revenues and profits.

In addition, the Asia/Pacific and Latin America regions have experienced instability in many of its economies and significant devaluations in local currencies. 19% of our sales in 2001, 13% of our sales in 2000, and 11% of our sales in 1999 were derived from customers located in these regions. These instabilities may continue or worsen, which could have a materially adverse effect on our results of operations. If international revenues are not adequate to offset the additional expense of expanding international operations, our future growth and profitability could suffer.

Concentration of Control—Our executive officers and directors retain significant control over us, which allows them to decide the outcome of matters submitted to stockholders for approval. This influence may not be beneficial to all stockholders.

As of December 31, 2001, Paul Ker-Chin Chang, Paul A. Marshall, and Robert C. Pfeiffer beneficially owned 26%, 23%, and 13%, respectively, of our outstanding shares of common stock. Consequently, these three individuals, acting together, are able to control the election of our directors and the approval of significant corporate transactions that must be submitted to a vote of stockholders. In addition, Mr. Chang, Mr. Marshall, and Mr. Pfeiffer constitute three of the six members of the board of directors and have significant influence in directing the actions taken by the directors. The interests of these persons may conflict with the interests of other stockholders, and the actions they take or approve may be contrary to those desired by other stockholders. This concentration of ownership and control of the management and affairs of our company may also have the effect of delaying or preventing a change in control of our company that other stockholders may consider desirable.

Potential Product Liability—Our products are complex, and our failure to detect errors and defects may subject us to costly repairs and product returns under warranty and product flability litigation.

Our products are complex and may contain undetected defects or errors when first introduced or as enhancements are released. These errors may occur despite our testing and may not be discovered until after a product has been shipped and used by our customers. Many of the products that we ship contain known imperfections that we consider

to be insignificant at the time of shipment. We may misjudge the seriousness of a product imperfection and allow it to be shipped to our customers. These risks are compounded by the fact that we offer many products, with multiple hardware and software modifications, which makes it more difficult to ensure high standards of quality control in our manufacturing process. The existence of these errors or defects could result in costly repairs and/or returns of products under warranty and, more generally, in delayed market acceptance of the product or damage to our reputation and business.

In addition, the terms of our customer agreements and purchase orders, which provide us with protection against unwarranted claims of product defect and error, may not protect us adequately from unwarranted claims against us, unfair verdicts if a claim were to go to trial, settlement of these kinds of claims, or future regulation or laws regarding our products. Our defense against these claims in the future, regardless of their merit, could result in substantial expense to us, diversion of management time and attention, and damage to our business reputation and our ability to retain existing customers or attract new customers.

Need For Highly Trained Personnel—We may not be able to retain for certain positions the R&D, manufacturing, sales, and marketing personnel we need to support our business.

Our business requires engineers, technicians, and other highly trained and experienced personnel. In particular, because our products require a sophisticated selling effort targeted at several key people within our prospective customers' organizations, we have a special need for experienced sales personnel. In addition, the complexity of our products and the difficulty of configuring and maintaining them require certain highly trained customer service and support personnel. Although competition for such persons has decreased recently, it remains strong, especially in the San Francisco Bay Area. Therefore, we may not be successful in retaining these individuals. Our failure to keep these kinds of employees could impair our ability to grow or maintain profitability.

Reliance On Non-U.S. Workers—If U.S. immigration policies prevent us from hiring or retaining the workers we need, our growth may be limited.

In the past, we have filled a significant portion of our new personnel needs, particularly for our engineers, with non-U.S. citizens holding temporary work visas that allow these people to work in the United States for a limited period of time. We rely on these non-U.S. workers because of the shortage of engineers, technicians, and other highly skilled and experienced workers in the telecommunications industry in the United States, in general, and in the San Francisco Bay Area, in particular. Regulations of the Immigration and Naturalization Service permit non-U.S. workers a limited number of extensions for their visas and also set quotas regarding the number of non-U.S. workers U.S. companies may hire. As a result, we face the risk that a portion of our existing employees may not be able to continue to work for us, thereby disrupting our operations, and that we may not be able to hire the number of engineers, technicians, and other highly skilled and experienced workers that we need to grow our business. Furthermore, changes in these regulations and local workforce availability could exacerbate these risks.

Intellectual Property Risks—Policing any unauthorized use of our intellectual property by third parties and defending any intellectual property infringement claims against us could be expensive and disrupt our business.

Our intellectual property and proprietary technology is an important part of our business, and we depend on the development and use of various forms of intellectual property and proprietary technology. As a result, we are subject to several related risks, including the risks of unauthorized use of our intellectual property and the costs of protecting our intellectual property.

Much of our intellectual property and proprietary technology is not protected by patents. If unauthorized persons were to copy, obtain, or otherwise misappropriate our intellectual property or proprietary technology without our

approval, the value of our investment in research and development would decline, our reputation and brand could be diminished, and we would likely suffer a decline in revenue. We believe these risks, which are present in any business in which intellectual property and proprietary technology play an important role, are exacerbated by the difficulty in finding unauthorized use of intellectual property in our business, the increasing incidence of patent infringement in our industry in general, and the difficulty of enforcing intellectual property rights in some foreign countries.

In addition, litigation has in the past been, and may in the future be, necessary to enforce our intellectual property rights. This kind of litigation is time-consuming and expensive to prosecute or resolve, and results in substantial diversion of management resources. We cannot ensure that we will be successful in that litigation, that our intellectual property rights will be held valid and enforceable in any litigation or that we will otherwise be able to protect our intellectual property and proprietary technology.

Anti-takeover Provisions—Anti-takeover provisions in our charter documents could prevent or delay a change of control and, as a result, negatively impact our stockholders.

Some provisions of our certificate of incorporation and bylaws may have the effect of discouraging, delaying, or preventing a change in control of our company or unsolicited acquisition proposals that you, as a stockholder, may consider favorable. These provisions provide for:

- authorizing the issuance of "blank check" preferred stock;
- a classified board of directors with staggered, three-year terms;
- prohibiting cumulative voting in the election of directors;
- requiring super-majority voting to effect certain amendments to our certificate of incorporation and by-laws;
- limiting the persons who may call special meetings of stockholders;
- prohibiting stockholder action by written consent; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholders meetings.

Some provisions of Delaware law and our stock incentive plans may also have the effect of discouraging, delaying, or preventing a change in control of our company or unsolicited acquisition proposals. These provisions also could limit the price that some investors might be willing to pay in the future for shares of our common stock.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We sell our products in North America, Asia, Latin America, Africa, the Middle East, and Europe. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates. Prior to our acquisition of Pro.Tel. S.r.l. ("Pro.Tel") in February 2000, international sales were denominated solely in U.S. dollars and, accordingly, we had not historically been exposed to fluctuations in non-U.S. currency exchange rates related to these sales activities. Since our acquisitions of Pro.Tel in February 2000 and Avantron in January 2001, we now have a small amount of sales denominated in Euros and Canadian dollars, and we have at certain times used derivative financial instruments to hedge our foreign exchange risks. As of December 31, 2001, we had no derivative financial instruments. To date, foreign exchange risks from these sales have not been material to our operations.

We are exposed to the impact of interest rate changes and changes in the market values of our investments. Our exposure to market rate risk for changes in interest rates relates primarily to our investment portfolio. We have not used derivative financial instruments in our investment portfolio. We invest our excess cash in debt instruments of the U.S. Government and its agencies and in high-quality corporate issuers, and, by policy, we limit the amount of credit exposure to any one issuer. We protect and preserve our invested funds by limiting default, market, and reinvestment risk.

Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates, or we may suffer losses in principal if forced to sell securities that have declined in market value due to changes in interest rates. Due to the nature of our investments, we anticipate no material market risk exposure.

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Independent Auditors' Report

The Board of Directors and Stockholders Sunrise Telecom Incorporated

We have audited the accompanying consolidated balance sheets of Sunrise Telecom Incorporated and subsidiaries (the Company) as of December 31, 2001 and 2000, and the related consolidated statements of net income, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended December 31, 2001. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Sunrise Telecom Incorporated and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

KPMG LIP

Mountain View, California January 23, 2002, except as to Note 14, which is as of February 28, 2002

Consolidated Balance Sheets

(in thousands, except share data)

	Decem	ber 31,
	2001	2000
Assets		
Current assets:		
Cash and cash equivalents	\$ 48,713	\$ 56,298
Investment in marketable securities	3,472	6,300
Accounts receivable, net of allowance of \$675 and \$982, respectively	13,997	18,419
Inventories	8,036	13,330
Prepaid expenses and other assets	714	1,748
Deferred tax asset	3,135	4,245
Total current assets	78,067	100,340
Property and equipment, net	28,850	8,580
Intangible assets, net of accumulated amortization of \$7,765 and \$2,696, respectively	16,805	11,725
Deferred tax asset	1,484	799
Other assets	1,415	4,112
Total assets	\$126,621	\$125,556
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,703	\$ 2,578
Short-term borrowings and current portion of notes payable	453	780
Other accrued expenses	9,767	12,581
Income taxes payable	1,002	1,888
Deferred revenue	280	546
Total current liabilities	13,205	18,373
Notes payable, less current portion	1,065	1,047
Other liabilities	598	492
Total liabilities	14,868	19,912
Commitments		
Stockholders' equity:		
Preferred stock, \$0.001 par value per share; 10,000,000 authorized shares;		
none issued and outstanding		_
Common stock, \$0.001 par value per share; 175,000,000 shares authorized;		
50,424,964 and 49,940,838 shares issued as of December 31, 2001 and 2000,		
respectively; 50,424,738 and 49,940,838 shares outstanding as of December 31, 2001		
and 2000, respectively	50	50
Additional paid-in capital	69,943	68,317
Deferred stock-based compensation	(4,304)	(6,611)
Retained earnings	46,244	43,961
Accumulated other comprehensive loss	(180)	(73)
Total stockholders' equity	111,753	105,644
Total liabilities and stockholders' equity	\$126,621	\$125,556

See accompanying notes to consolidated financial statements.

Consolidated Statements of Net Income

(in thousands, except per share data)

	Years Ended December 31,		
	2001	2000	1999
Net sales	\$79,059	\$113,481	\$61,465
Cost of sales	25,509	32,994	14,736
Gross profit	53,550	80,487	46,729
Operating expenses:			
Research and development	18,490	17,555	10,694
Sales and marketing	20,329	22,694	15,215
General and administrative	13,779	9,790	3,912
Total operating expenses	_52,598	50,039	29,821
Income from operations	952	30,448	16,908
Other income, net	2,569	1,909	327
Income before income taxes	3,521	32,357	17,235
Income taxes	704	11,972	6,291
Net income	\$ 2,817	\$ 20,385	\$10,944
Earnings per share:			
Basic	\$ 0.06	\$ 0.43	\$ 0.25
Diluted	\$ 0.05	\$ 0.41	\$ 0.24
Shares used in computing earnings per share:			
Basic	50,195	47,374	44,667
Diluted	51,325	49,610	45,824

Consolidated Statements of Stockholders' Equity and Comprehensive Income

(in thousands)

	Commo Shares	n Stock Amount	Addit Paid Cap	d-in	Deferred Stock-based Compensation	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' Equity	Comprehensive income
Balances, December 31, 1998	44,519	\$ 45	\$	481	\$ —	\$13,044	\$ —	\$ 13,570	
Exercise of common stock options	229	_		177				177	
Repurchase of common stock Issuance of stock in connection with	(135)	_		(13)	_	(189)	_	(202)	
Hukk acquisition	300	_		000	_		-	1,000	
Deferred stock-based compensation Amortization of deferred stock-based	_	_	2,	270	(2,270)		_		
compensation		_		_	205	(000)		205	
Cash dividend of \$.015 per share		_		_		(223)		(223)	#10.044
Net income						10,944		<u>10,944</u>	\$10,944
Comprehensive income									\$10,944
Balances, December 31, 1999	44,913	45	3,	915	(2,065)	23,576		25,471	
Exercise of common stock options Common stock issued under	671	1		797	_	_		798	
Employee Stock Purchase Plan Issuance of stock in connection with	40	-		501	_	_		501	
Pro.Tel acquisition	500	_	5,	000	_	_	_	5,000	
Offering	3,817	4	51.	604		_		51,608	
Deferred stock-based compensation		_	,	500	(6,500)	_	_	_	
Amortization of deferred stock-based									
compensation	_	_			1,954	_	_	1,954	
Change in unrealized gain on available-									
for-sale investments, net		_		_	-	_	3	3	\$ 3
Cumulative translation adjustment		_		_		_	(76)	(76)	(76)
Net income						20,385		20,385	20,385
Comprehensive income									\$20,312
Balances, December 31, 2000	<u>49,941</u>	50	_68,	317	(6,611)	43,961	<u>(73)</u>	105,644	
Exercise of common stock options Common stock issued under	446	_		398	_	_		398	
Employee Stock Purchase Plan	264	_	1,	273				1,273	
Repurchase of common stock	(226)	_	(319)		(534)	_	(853)	
Deferred stock-based compensation Amortization of deferred stock-based	_	_	(182)	182	_	_		
compensation				_	2,125	_	_	2,125	
Tax benefit of stock option plans	_			456		_	_	456	
Change in unrealized gain on available-									
for-sale investments, net	_	_		_			19	19	\$ 19
Cumulative translation adjustment		_		_			(126)	(126)	(126)
Net income					· <u>·</u>	2,817		2,817	2,817
Comprehensive income									\$ 2,710
Balances, December 31, 2001	50,425	\$ 50 ——	\$69, ——	943	\$(4,304) =	\$46,244 	\$(180) ====	\$111,753	

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows

(in thousands)

	Year E	er 31,	
	2001	2000	1999
Cash flows from operating activities: Net income	\$ 2,817	\$ 20,385	\$10,944
Adjustments to reconcile net income to net cash provided by operating activities: Depreciation and amortization	8,427 2,125 199 368	4,271 1,954 87 (3,183)	1,205 205 156 (1,055)
Accounts receivable Inventories Prepaid expenses and other assets Accounts payable and accrued expenses Income taxes payable Deferred revenue	5,185 5,695 156 (4,580) (635)	(8,205) (5,775) (1,640) 6,090 (977) 365	(4,721) (4,536) (259) 6,112 2,107 (32)
Net cash provided by operating activities	19,751	13,372	10,126
Cash flows from investing activities: Purchase of long-term investment Purchases of marketable securities Sales of marketable securities Capital expenditures Acquisitions of Hukk, Pro.Tel, and Avantron, net of cash acquired	(19,628) 22,475 (19,375) (11,274)	(241) (6,298) — (5,614) (4,717)	(39) — (2,734) (782)
Deposit on land and building		(16.070)	(2,675)
Net cash used in investing activities	(27,802)	(16,870)	(6,230)
Cash flows from financing activities: Proceeds from short-term borrowings Payment of short-term borrowings Proceeds from notes payable Payments on notes payable Repurchase of common stock Cash dividends Net proceeds from issuance of common stock	— (177) 577 (626) (853) — 1,273	2,890 (2,890) — (1,649) — 52,108	(63) (202) (223)
Proceeds from exercise of stock options	398	798	177
Net cash provided by (used in) financing activities	592	51,257	(311)
Effect of exchange rates on cash	(126)	(76)	
Net increase (decrease) in cash and cash equivalents	(7,585) 56,298	47,683 8,615	3,585 5,030
Cash and cash equivalents, end of year	\$ 48,713	\$ 56,298	\$ 8,615
Supplemental disclosures of cash flow information: Cash paid during the year: Interest	\$ 44	\$ 125	\$ 2
Income taxes	\$ 808	\$ 15,958	\$ 5,365
Noncash investing and financing activities: Stock issued for acquisitions of Hukk and Pro.Tel	\$ —	\$ 5,000	\$ 1,000
Unrealized gain on marketable securities and investments	\$ 19	\$ 3	\$ —
Promissory note issued in connection with acquisition		\$ 1,000	\$ —
Deferred stock-based compensation	<u>\$</u>	\$ 6,500	\$ 2,270

See accompanying notes to consolidated financial statements.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements

(1) BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

(a) Business

Sunrise Telecom Incorporated and subsidiaries (the "Company") was incorporated as Sunrise Telecom, Inc. in California in October 1991. In July 2000, the Company reincorporated in Delaware and changed its name to Sunrise Telecom Incorporated (see Note 8). The Company manufactures and markets service verification equipment to prequalify, verify, and diagnose telecommunications, cable TV, and Internet networks. The Company markets and distributes its products on six continents through a worldwide network of manufacturers, sales representatives, distributors, and direct sales people. The Company has wholly owned subsidiaries in Norcross, Georgia; Taipei, Taiwan; Modena, Italy; Tokyo, Japan; Seoul, Korea; and Anjou, Canada. It also has a representative liaison office in Beijing, China and a foreign sales corporation in Barbados.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany transactions have been eliminated in consolidation.

(c) Revenue Recognition

The Company recognizes revenue when earned. It recognizes revenue from product sales upon shipment, assuming collectibility of the resulting receivable is probable. When the arrangement with the customer includes future obligations or obtaining customer acceptance, the Company recognizes revenue when those obligations have been met or customer acceptance has been received. The Company defers revenue from services and support provided under its extended warranty programs and recognizes it on a straight-line basis over the warranty period. Deferred revenue represents amounts received from customers in advance of services and support to be provided or prior to customer acceptance. Provisions are recorded at the time of sale for estimated product returns, standard warranty obligations, and customer support.

(d) Warranty Cost

The Company provides standard warranties covering parts and labor on all its hardware products. Estimated warranty costs for such standard warranties are charged to cost of sales when the related sales are recognized.

(e) Research and Development

Costs incurred in the research and development of new products and enhancements to existing products are expensed as incurred until the product has been completed and tested and is ready for commercial manufacturing. To date, hardware and software development projects have been completed concurrently with the establishment of commercial manufacturing and technological feasibility in the form of a working model. Accordingly, no development costs have been capitalized.

(f) Cash Equivalents and Short-term Investments

The Company considers all highly liquid investments with a maturity of 90 days or less when acquired to be cash equivalents. Cash equivalents as of December 31, 2001 and 2000 consist primarily of cash on deposit with banks, money market funds, auction rate securities, and marketable debt securities. The Company determines the appropriate

Notes to Consolidated Financial Statements—(Continued)

classification of debt and equity securities at the time of purchase and reevaluates this designation as of each balance sheet date. Investments classified as available for sale are reported at market value, with the unrealized gains and losses, net of tax, reported as a separate component of other comprehensive income (loss) in stockholders' equity. Realized gains and losses on sales of investments and declines in value determined to be other than temporary are included in other income (expense).

(g) Fair Value of Financial Instruments

For certain financial instruments, including cash and cash equivalents, accounts receivable, accounts payable, notes payable, and accrued expenses, recorded amounts approximate fair value due to the relatively short maturity period.

(h) Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the weighted-average method.

(i) Property and Equipment

Property and equipment are carried at cost. Depreciation and amortization is computed using the straight-line method over the shorter of the estimated useful life of the asset or the lease term. Useful lives range from three to thirty-nine years for buildings and improvements and to five years for machinery and equipment.

The Company reviews property and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of property and equipment is measured by comparison of its carrying amount to the future net cash flows the property and equipment are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the property and equipment exceeds its fair value. To date, the Company has made no adjustments to the carrying values of its property and equipment.

(j) Intangible Assets

Intangible assets include the fair value of issued and pending patents, technology, noncompete agreements, and goodwill. The Company amortizes such intangibles on a straight-line basis over two to five years based on expected lives of patents, technology, noncompete agreements, and goodwill. Starting January 1, 2002, goodwill will not be amortized pursuant to Statement of Financial Accounting Standards ("SFAS") No. 142, Goodwill and Other Intangible Assets.

The Company reviews intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Impairment is determined based on a comparison between the undiscounted future cash flows of the intangible assets, and their carrying value.

(k) Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the enacted tax laws expected to apply to

SUMRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements—(Continued)

taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the results of operations in the period that includes the enactment date.

(I) Business and Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash equivalents and accounts receivable. The Company's cash equivalents are primarily in highly liquid money market funds with various major financial institutions. The Company believes no significant concentrations of credit exist with respect to these financial instruments.

Concentrations of credit risk with respect to trade receivables are limited as the majority of the Company's sales are derived from large telephone operating companies and other established telecommunication companies located throughout the world. The Company performs ongoing credit evaluations of its customers. Based on management's evaluation of potential credit losses, the Company believes its allowances for doubtful accounts is adequate. The Company had one customer that accounted for 16% and 41%, of its net sales for the years ended December 31, 2000 and 1999, respectively, and \$361,000 of its accounts receivable as of December 31, 2000. A second customer accounted for 17% of sales for the year ended December 31, 2000, and \$3,155,000 of the Company's accounts receivable as of December 31, 2000. The Company had no one customer that accounted for more than 10% of its sales for the year ended December 31, 2001.

The Company's customers are concentrated in the telecommunications industry. Accordingly, the Company's future success depends on the buying patterns of these customers and the continued demand by these customers for the Company's products. Additionally, the telecommunications equipment market is characterized by rapidly changing technology, evolving industry standards, changes in end user requirements, and frequent new product introductions and enhancements. Furthermore, the telecommunications industry has experienced and is expected to continue to experience consolidation. The Company's continued success will depend upon its ability to enhance existing products and to develop and introduce, on a timely basis, new products and features that keep pace with technological developments and emerging industry standards. Furthermore, as a result of its international sales, the Company's operations are subject to risks of doing business abroad, including but not limited to, fluctuations in the value of currency, longer payment cycles, and greater difficulty in collecting accounts receivable.

(m) Earnings per Share

Basic earnings per share ("EPS") is computed using the weighted-average number of common shares outstanding during the period. Diluted EPS is computed using the weighted-average number of common and dilutive common equivalent shares outstanding during the period. Dilutive common equivalent shares consist of common stock issued in the Pro.Tel acquisition and common stock issuable upon exercise of stock options using the treasury stock method.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements—(Continued)

The following is a reconciliation of the shares used in the computation of basic and diluted EPS (in thousands):

	Years Ended December 31,		
	2001	2000	1999
Basic EPS—weighted-average number of common shares			
outstanding	50,195	47,374	44,667
Effect of dilutive common equivalent shares:			
Stock options outstanding	1,130	2,111	1,157
Stock issued in acquisition subject to put arrangement		125	
Diluted EPS—weighted-average number of common shares and			
common equivalent shares outstanding	51,325	49,610	45,824

Pursuant to Securities and Exchange Commission Staff Accounting Bulletin No. 98, convertible preferred stock and common stock granted for nominal consideration prior to the anticipated effective date of an initial public offering (IPO) must be included in the calculation of basic and diluted net income per share as if they had been outstanding for all periods presented. To date, the Company has not had any such issuances or grants for nominal consideration.

(n) Stock-Based Compensation

The Company accounts for employee stock-based compensation using the intrinsic-value method, in accordance with Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock-Issued to Employees. Accordingly, compensation cost is recorded on the date of grant to the extent that the fair value of the underlying share of common stock exceeds the exercise price for a stock option or the purchase price for a share of common stock. During 1999, the Company recorded deferred stock-based compensation cost for stock options issued to employees at exercise prices that were subsequently determined to have been issued below the fair value of the stock on the date of grant. In addition, the Company recorded deferred stock-based compensation cost for stock options granted to employees of Pro.Tel in the first quarter of 2000. The compensation cost associated with both of these stock option grants is amortized as a charge against operating results on a straight-line basis over the four year vesting period of the options. The Company has allocated the amortization of deferred stock-based compensation to the departments in which the related employees' services are charged. Pursuant to SFAS No. 123, Accounting for Stock-Based Compensation, the Company discloses the pro forma effect of using the fair value method of accounting for employee stock-based compensation arrangements.

(o) Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(p) Foreign Currency Translation

The functional currency for the Company's foreign subsidiary located in Taiwan is the U.S. dollar. Accordingly, the Company remeasures the monetary assets and liabilities of this foreign subsidiary at year-end exchange rates while remeasuring nonmonetary items at historical rates. Income and expense accounts are remeasured at the weighted average rates in effect during the year, except for depreciation which is remeasured at historical rates. Remeasurement adjustments and transaction gains and losses are recognized in income in the year of occurrence.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements—(Continued)

The functional currencies for the Company's other foreign subsidiaries are the local currencies, including the Lira for the subsidiary located in Italy. Accordingly, the Company applies the current exchange rate to translate the subsidiary's assets and liabilities and the weighted average exchange rate to translate the subsidiary's revenues, expenses, gains and losses into U.S. dollars. Translation adjustments are included as a separate component of comprehensive income within stockholders' equity in the accompanying consolidated financial statements.

In December 2000, the Company recorded a \$381,000 gain on a forward contract used to hedge the purchase price of the then pending acquisition of Avantron, the Company's Canadian subsidiary.

(q) Advertising Expense

The Company recognizes the cost of advertising as incurred. Such costs are included in selling and marketing expense and totaled approximately \$1,258,000, \$1,866,000, and \$1,023,000 during the years ended December 31, 2001, 2000, and 1999, respectively.

(r) Recent Accounting Pronouncements

In July 2001, the Financial Accounting Standards Board ("FASB") issued two new pronouncements, SFAS No. 141, *Business Combinations*, and SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 141, which required immediate adoption, prohibits the use of the pooling-of-interest method for business combinations initiated after June 30, 2001 and also applies to all business combinations accounted for by the purchase method that are completed after June 30, 2001. There are also transitional provisions that apply to business combinations completed before July 1, 2001, which were accounted for by the purchase method. SFAS No. 142 is effective for fiscal years beginning after December 15, 2001 and applies to all goodwill and other intangible assets reported on an entity's balance sheet at that date, regardless of when those assets were initially recognized. The Company's adoption of SFAS No. 141 did not have a significant impact on its financial position and results of operations. At December 31, 2001, the Company had unamortized goodwill in the amount of approximately \$13.5 million, and unamortized identifiable intangible assets in the amount of approximately \$1.5 million. These amounts will be subject to the transition provisions of SFAS No. 141 and 142, and as a result, beginning January 1, 2002, goodwill will no longer be amortized. Amortization expense related to goodwill and intangible assets was approximately \$4.6 million and \$2.1 million, for the years ended December 31, 2001 and 2000, respectively.

In October 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, which is effective for financial statements issued for fiscal years beginning after December 15, 2001. SFAS No. 144 develops one accounting model for long-lived assets that are to be disposed of by sale and requires that these assets be measured at the lower of book value or fair value less costs to sell. Additionally, SFAS No. 144 expands the scope of discontinued operations to include all components of an entity with operations that can be distinguished from the rest of the entity and will be eliminated from the ongoing operations of the entity in a disposal transaction. The adoption of SFAS No. 144 is not expected to have a material impact on the Company's financial position or results of operations.

(2) RELATED PARTY TRANSACTIONS

One of the significant stockholders of the Company is also the owner of Telecom Research Center. During 2001, 2000, and 1999, the Company purchased equipment used in its manufacturing process totaling \$59,000, \$143,000, and \$58,000, respectively, from Telecom Research Center. The Company's accounts payable to Telecom Research

Notes to Consolidated Financial Statements—(Continued)

Center were \$2,115 and \$35,000 at December 31, 2001 and 2000, respectively. The terms of the Company's transactions with Telecom Research Center were similar to those with unrelated parties.

As of December 31, 2001, the Company has employee loans outstanding balances of approximately \$25,000. The loans are supported by promissory notes, bear interest at rates up to 7.75% per annum, and are payable monthly with the final payment due in December 2004.

(3) FINANCIAL STATEMENT DETAILS

Inventories

Inventories consisted of the following (in thousands):

	December 31,	
	2001	2000
Raw materials	\$4,089	\$ 8,987
Work in process	1,603	2,070
Finished goods	2,344	2,273
	\$8,036	\$13,330

Property and Equipment

Property and equipment consisted of the following (in thousands):

	December 31,	
	2001	2000
Land	\$ 8,821	\$ —
Building	9,243	_
Equipment	15,811	11,786
Furniture and fixtures	2,137	937
Leasehold improvements	618	307
	36,630	13,030
Less accumulated depreciation and amortization	7,780	4,450
	\$28,850	\$ 8,580

Other Accrued Expenses

Other accrued expenses consisted of the following (in thousands):

	December 31,	
	2001	2000
Accrued compensation and other related benefits	\$5,399	\$ 5,988
Commissions payable	1,334	2,052
Sales tax payable	356	222
Accrued warranty	1,398	1,459
Other accrued expenses	1,280	2,860
	\$9,767	\$12,581

Notes to Consolidated Financial Statements—(Continued)

(4) VALUATION AND QUALIFYING ACCOUNTS

A summary of valuation and qualifying accounts is as follows (in thousands):

	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions	Balance at End of Year
Allowance for doubtful accounts:				
2001	\$982	\$844	\$1,151	\$675
2000	252	852	122	982
1999	220	32	_	252

(5) OTHER ASSETS

During 1998, the Company acquired 1,666,667 shares (approximately 16.4%) of the common stock of Top Union Electronics ("Top Union"), a Taiwan R.O.C. corporation, for a purchase price of \$607,000. Top Union is a subcontract manufacturer utilized by the Company for the manufacture of certain products. During 2000 and 1999, the Company invested an additional \$241,000 and \$39,000, respectively, in Top Union as part of two of three external rounds of third-party financing obtained by Top Union. These investments by the Company were less than 16.4% of the total financing raised by Top Union and, thus, diluted the Company's ownership of Top Union to 13.4%. In 2001, the Company did not invest in the one external round of financing offered by Top Union. As of December 31, 2001, the Company's ownership of Top Union declined to approximately 9.3%. The Company accounts for this investment using the cost method of accounting, and evaluates impairment based on a comparison between the carrying value of the investment, and its fair value based on the valuation associated with third-party external rounds of financing. To date, the Company has not recognized any impairment charges for this investment.

Other assets as of December 31, 2001 consisted primarily of the Top Union investment. Other assets as of December 31, 2000 consisted primarily of a deposit in the amount of \$2,842,000 for the Company's new facility, which was completed in March 2001, and the Company's investment in Top Union.

(6) NOTES PAYABLE AND LINE OF CREDIT

In connection with various acquisitions completed during 2000 and 1999, the Company had ten non-interest bearing notes payable outstanding at December 31, 2001. Annual amounts to be repaid under these notes total \$397,000, \$347,000, and \$141,000 for 2002, 2003, and 2004, respectively.

The Company has a \$9,000,000 revolving line of credit with a financial institution that expires on August 1, 2002, bearing interest at the bank's prime rate less 0.25% (4.50% at December 31, 2001). The agreement, which is collateralized by the receivables and inventories of the Company, contains certain financial covenants and restrictions. As of December 31, 2001, there were no balances outstanding under the line of credit.

The Company also had short-term borrowings from various Italian financial institutions, which bear interest at variable rates, ranging from 6.675% to 9.6875% at December 31, 2001, based on the ABI prime rate. At December 31, 2001, \$56,000 had been drawn down under these facilities. Generally, these foreign credit lines do not require commitment fees or compensating balances and are cancelable at the option of the Company or the financial institutions.

The remaining borrowings consist of a loan from the Italian government, which bears interest at 2% a year. At December 31, 2001, the outstanding balance on this loan was \$577,000. Principal payments to start in 2004.

Notes to Consolidated Financial Statements—(Continued)

(7) LEASES

The Company leases facilities under several operating lease agreements which require the Company to pay property taxes and normal maintenance. Future minimum lease payments, under these agreements, as of December 31, 2001, are as follows (in thousands):

Year Ending Decem	ıber	31.
-------------------	------	-----

2002	\$ 728
2003	462
2004	401
2005	130
2006	77
Thereafter	36
	\$1,834

Rent expense for the years ended December 31, 2001, 2000 and 1999 was approximately \$1,321,000, \$931,000, and \$511,000, respectively.

(8) CAPITAL STOCK

Common Stock

In April 2000, the Company's Board of Directors authorized a three-for-one stock split of its common stock. All share amounts in the accompanying consolidated financial statements have been retroactively adjusted to reflect the stock split.

Prior to its initial public offering, the Company established a program of repurchasing common stock in order to offer liquidity to its stockholders. Repurchases were offered based on valuations performed by the Company of the fair value of its stock at the time of repurchase. During 1999, the Company repurchased approximately 135,000 shares of common stock for \$202,000 for this program. In 2001, the Company's Board of Directors authorized the repurchase of up to \$5.0 million of the Company's common stock on the open market. During 2001, the Company repurchased approximately 217,000 shares of common stock for an aggregate of \$0.8 million for this program. In addition, the Company repurchased approximately 9,000 shares of common stock for an aggregate of \$18,000 from former employees as stated in the Stock Option Plan.

Recapitalization

On July 10, 2000, the Company was reincorporated in Delaware with the authorization of 175,000,000 shares of \$0.001 par value per share common stock and 10,000,000 shares of \$0.001 par value preferred stock.

Initial Public Offering

On July 12, 2000, the Company completed its initial public offering of 4.6 million shares at \$15 per share, including 600,000 over-allotment shares, of which 782,572 shares were sold by selling stockholders. Net proceeds to the Company from the offering after underwriters' fees and expenses of approximately \$5.7 million totaled approximately \$51.6 million.

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements—(Continued)

(9) STOCK COMPENSATION PLANS

2000 Employee Stock Purchase Plan

In April 2000, the Company's Board of Directors approved the adoption of the 2000 Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan became effective upon the Company's initial public offering. As of December 31, 2001, the total number of shares reserved for issuance under the Purchase Plan equals 850,000 shares of common stock. The Purchase Plan permits eligible employees to purchase common stock through payroll deductions of up to 15% of the employee's total base compensation, excluding bonuses, commissions, and overtime and not to exceed \$25,000 in any plan year, at a price equal to 85% of the lower of the fair market value of the common stock on the first day of the offering period or on the last day of the purchase period.

Stock Option Plan

In April 2000, the Company's Board of Directors approved the adoption of the 2000 Stock Plan (the "Stock Plan"). The Stock Plan became effective upon the Company's initial public offering. The total number of shares reserved for issuance under the Stock Plan equals 4,750,000 shares of common stock plus 5,250,000 that remained reserved for issuance under the 1993 stock option plan as of the date the stock plan became effective, for a total of 10,000,000 shares. All outstanding options under the 1993 stock option plan will be administered under the 2000 Stock Plan but will continue to be governed by their existing terms.

Options may be granted as incentive stock options or nonstatutory stock options at the fair market value of such shares on the date of grant as determined by the Board of Directors. Options granted subsequent to 1996 vest over a 4-year period, and expire at the end of 10 years from the date of grant, or sooner, if terminated by the Board of Directors.

The options granted under the 1993 stock option plan include a provision whereby the option holder may elect at any time to exercise the option prior to the full vesting of the option. Unvested shares so purchased are subject to a repurchase right by the Company at the original purchase price. Such right shall lapse at a rate equivalent to the vesting period of the original option. As of December 31, 2001, 2000, and 1999 shares issued and subject to repurchase were 56,250, 144,525, and 25,161, respectively.

Notes to Consolidated Financial Statements—(Continued)

Option activity is summarized as follows:

70216	⊩naead	December	3.1

	rears ended December 31,					
	200	11	2000		1999	
	Number of Options	Weighted- Average Price Per Share	Number of Options	Weighted- Average Price Per Share	Number of Options	Weighted- Average Price Per Share
Outstanding at beginning of period	2,921,360	\$3.28	2,453,100	\$ 1.46	1,811,145	\$1.09
Granted at market value	1,109,708	5.09	627,437	11.66	_	_
Granted at less than market value		_	650,001	_	1,079,100	1.88
Exercised	(445,951)	0.89	(671,150)	1.19	(229,095)	0.77
Canceled	(280,353)	8.14	(138,028)	3.83	(208,050)	1.14
Options at end of period	3,304,764	\$3.80	2,921,360	\$ 3.28	2,453,100	\$1.46
Weighted-average fair value of options granted during the period with exercise prices at fair value		\$3.75		\$ 5.89		\$ <u> </u>
Weighted-average fair value of options granted during the period with exercise prices less than market value at date of						
grant		<u>\$ —</u>		\$10.00		\$2.58

Information regarding stock options outstanding as of December 31, 2001 is summarized in the table below.

		Options Outsta	anding	Vested Options	
Range of Exercise Prices	Shares Outstanding	Weighted-Average Remaining Contractual Life (years)	Weighted- Average Exercise Price	Vested shares	Weighted- Average Exercise Price
\$0.00	487,501	8.16	\$ 0.00		\$ 0.00
0.60	86,600	4.28	0.60	86,600	0.60
1.10-1.50	823,724	6.58	1.42	501,974	1.39
2.17	436,207	7.79	2.17	204,770	2.17
4.75-4.94	860,100	9.05	4.94	_	0.00
5.40-8.54	136,508	9.48	6.01		0.00
10.00	357,297	8.21	10.00	88,196	10.00
11.00	68,626	8.51	11.00	17,156	11.00
15.00	5,001	8.53	15.00	1,767	15.00
20.38	43,200	8.80	20.38	12,596	20.38
	3,304,764			913,059	

Notes to Consolidated Financial Statements—(Continued)

The Company uses the intrinsic-value based method to account for its stock-based compensation plans. With respect to options granted in 2000 and 1999, the Company recorded unearned stock-based compensation of \$6,500,010 and \$2,270,000, respectively, for the difference at the grant date between the exercise price and the fair value. For options granted in 2001, the Company has not recorded any deferred compensation cost since the exercise price of each option equaled the fair value of the underlying common stock on the grant date. During 2001, deferred stock-based compensation was reduced by \$182,000 due to forfeitures of the underlying unvested options.

The remaining unamortized deferred stock-based compensation amount, for all options granted through December 31, 2001, is expected to be amortized as charges against operating results as follows for the years ending December 31: 2002, \$2,098,000; 2003, \$1,925,000; and 2004, \$238,000. These charges may be reduced as a result of future forfeitures of options to which the unamortized deferred stock-based compensation balance pertains.

If compensation for the Company's stock-based compensation plans had been determined in a manner consistent with the fair value approach described in SFAS No. 123, the Company's net income and earnings per share, as reported, would have been reduced to the pro forma amounts indicated below (in thousands, except per share data):

	Years Ended December 31,		
	2001	2000	1999
Net income applicable to common stock:			
As reported	\$2,817	\$20,385	\$10,944
Adjusted pro forma	1,862	20,450	10,883
Basic earnings per share:			
As reported	0.06	0.43	0.25
Adjusted pro forma	0.04	0.43	0.24
Diluted earnings per share:			
As reported	0.05	0.41	0.24
Adjusted pro forma	0.04	0.41	0.24

The provisions of SFAS No. 123 are effective for options granted beginning January 1, 1996. Options vest over several years and new options are generally granted each year. Because of these factors, the pro forma effect shown above may not be representative of the pro forma effect of SFAS No. 123 in future years.

For the purposes of computing pro forma net income, the fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. The assumptions used to value the option grant are as follows:

	Years Ended December 31,		
	2001	2000	1999
Dividend yield	None	None	None
Expected term	4 years	4 years	4 years
Risk-free interest rate	5.06%	4.90%	5.66%
Volatility rate	1.0638	0.602	None

Notes to Consolidated Financial Statements—(Continued)

(10) ACQUISITIONS

Hukk

In July 1999, the Company acquired all of the outstanding stock of Hukk Engineering ("Hukk"), a developer of cable TV service verification equipment. The Company paid approximately \$800,000 in cash and acquisition costs, \$900,000 in notes payable, and 300,000 shares of the Company's common stock valued at \$1,000,000 based on an independent valuation. The transaction has been accounted for using the purchase method of accounting. The results of Hukk and the estimated fair value of assets acquired and liabilities assumed are included in the Company's financial statements from the date of acquisition. In connection with the Hukk acquisition, the purchase price has been allocated to the assets and liabilities assumed based on the fair values on the date of acquisition as follows (in thousands):

Current assets	\$ 349
Property and equipment, net	65
Intangibles and goodwill associated with acquisition	2,495
Current liabilities	(209)
	\$2,700

Intangibles include the fair value of technology and noncompete agreements, with the remaining excess purchase price allocated to goodwill. The Company amortizes the intangibles on a straight-line basis over four to five years based on expected lives of technologies, noncompete agreements, and goodwill. If the identified technologies are not successfully developed, the Company may not utilize the value assigned to intangible assets. Effective January 1, 2002, the Company will implement SFAS No. 142, and accordingly, goodwill resulting from the Hukk Acquisition will no longer be amortized. At December 31, 2001, the Company had \$1.2 million (including work-force in place) in unamortized goodwill remaining from the Hukk Acquisition. The Company will periodically review this asset for impairment, as required by SFAS No. 142.

Pro.Tel

On February 22, 2000, the Company acquired all the outstanding shares of Pro.Tel. S.r.I. ("Pro.Tel") and subsidiaries, an Italian manufacturer of distributed network signal analysis equipment. The Company paid approximately \$4,100,000 in cash and acquisition costs, notes payable related to non-compete agreements for \$500,000, payable over four years, and 500,001 shares of the Company's stock valued at \$5,000,000.

The transaction has been accounted for using the purchase method of accounting. The results of Pro.Tel and the estimated fair value of assets acquired and liabilities assumed are included in the Company's financial statements from the date of acquisition. In connection with the Pro.Tel acquisition, the purchase price has been allocated to the assets and liabilities assumed based on the fair values on the date of acquisition as follows (in thousands):

Current assets	\$1,068
Property and equipment, net	177
Goodwill and other intangible assets	9,340
Other long term assets	29
Current liabilities	(998)
	\$9,616

Notes to Consolidated Financial Statements—(Continued)

The Company amortizes the intangibles on a straight-line basis over two to five years based on expected lives of technologies, non-compete agreements, acquired workforce, and goodwill. If the identified technologies are not successfully developed, the Company may not utilize the value assigned to intangible assets. Effective January 1, 2002, the Company will implement SFAS No. 142, and accordingly, goodwill resulting from the Pro.Tel Acquisition will no longer be amortized. At December 31, 2001, the Company had \$5.6 million (including work-force in place) in unamortized goodwill remaining from the Pro. Tel. acquisition. The Company will periodically review this asset for impairment, as required by SFAS No. 142.

Pro.Tel USA

On February 4, 2000, the Company acquired all of the assets of Pro.Tel USA for \$400,000 cash and a \$100,000 note repayable in May 2000. The transaction has been accounted for using the purchase method of accounting. The results of this acquired entity are included in the Company's financial statements from the date of acquisition and are not material to the Company's results of operations.

Avantron

On January 8, 2001, the Company acquired all of the outstanding shares of Avantron Technologies, Inc. ("Avantron"), a Canadian company that specializes in the design and manufacture of Cable TV/modem spectrum analyzers and performance monitoring systems. The Company paid \$11.9 million in cash and short-term notes payable.

The acquisition was accounted for using the purchase method of accounting, and, accordingly, goodwill and other intangible assets of \$10.2 million was recorded, to be amortized on a straight-line basis over its original estimated useful life of two to five years. Effective January 1, 2002, the Company will implement SFAS No. 142, and accordingly, goodwill resulting from the Avantron acquisition will no longer be amortized. At December 31, 2001, the Company had \$8.2 million (including work-force in place) in unamortized goodwill remaining from the Avantron acquisition. The Company will periodically review this asset for impairment, as required by SFAS No. 142.

In connection with the Avantron acquisition, the purchase price has been allocated to the assets and liabilities assumed based on the fair values on the date of acquisition as follows (in thousands):

Current assets	\$ 2,524
Property and equipment, net	477
Goodwill and other intangible assets	10,156
Current liabilities	(1,306)
	\$11,851

Notes to Consolidated Financial Statements—(Continued)

Pro Forma Results of Operations

The following summary prepared on an unaudited pro forma basis reflects the condensed consolidated results of operations for the years ended December 31, 2000 and 2001, assuming Pro.Tel and Avantron had been acquired at the beginning of the periods presented (in thousands, except per share data):

	Year Ended December 31,	
	2001	2000
Net sales	\$79,059	\$119,725
Net income	\$ 2,659	\$ 19,063
Basic earnings per share	\$ 0.05	\$ 0.40
Shares used in pro forma per share computation	50,195	47,374

The pro forma results are not necessarily indicative of what would have occurred if the acquisitions had been in effect for the periods presented. In addition, they are not intended to be a projection of future results and do not reflect the synergies that might be achieved from combined operations.

(11) 401(K) PLAN

In 1996, the Company adopted a 401(k) Plan (the Plan). Participation in the Plan is available to all full-time employees. Each participant may elect to contribute up to 15% of his or her annual salary, but not to exceed the statutory limit as prescribed by the Internal Revenue Code. The Company may make discretionary contributions to the Plan. These contributions vest annually over seven years. Contributions to the Plan of \$1,104,000, \$639,000, and \$747,000 were made by the Company in 2001, 2000, and 1999, respectively.

(12) INCOME TAXES

The provision for income taxes consisted of the following (in thousands):

	2001	_2000_	1999
Current expense:			
Federal	\$ 334	\$13,218	\$ 6,394
State	2	1,937	952
	336	15,155	7,346
Deferred expense (benefit):			
Federal	783	(2,692)	(960)
State	(415)	(491)	(95)
	368	(3,183)	(1,055)
	\$ 704	\$11,972	\$ 6,291

Notes to Consolidated Financial Statements—(Continued)

Income tax expense differed from the amounts computed by applying the U.S. federal income tax rate (34% for the year ended December 31, 2001, and 35% for each of the years ended December 31, 2000 and 1999) to pretax income, as a result of the following (in thousands):

	2001	2000	1999
Computed "expected" tax	\$1,197	\$11,325	\$6,032
State taxes, net of federal income tax benefit	(272)	940	557
Research credit	(685)	(691)	(480)
Foreign sales corporation benefit	(112)	(288)	(109)
Tax-exempt interest	(132)	(126)	
Nondeductible compensation	170	199	87
Nondeductible goodwill amortization	145	143	44
Nondeductible meals and entertainment	44	38	12
Tax rate change	184		
Other, net	165	432	148
	\$ 704	\$11,972	\$6,291

The types of temporary differences that give rise to significant portions of the Company's deferred tax assets and liabilities are set out below (in thousands):

	Decemb	er 31,
	2001	2000
Deferred tax assets:		
Inventory reserves and additional costs capitalized	\$ 805	\$ 480
Accrued compensation and vacation	977	1,945
Allowance for doubtful accounts	269	408
Other accruals and reserves	978	1,292
Net operating losses and start-up costs	23	3
Tax credits	441	
Intangible amortization	2,469	1,011
State income taxes		678
Total gross deferred tax assets	_5,962	5,817
Deferred tax liabilities:		
Property and equipment	(929)	(512)
Unrealized exchange gains	(39)	(20)
Federal tax cost of net state deferred assets	(375)	(241)
Total deferred tax liabilities	(1,343)	(773)
Net deferred tax assets	<u>\$ 4,619</u>	\$5,044

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Based on the level of historical taxable income and projections for future taxable income over the periods,

Notes to Consolidated Financial Statements—(Continued)

which the deferred tax assets are deductible, management believes it is more likely than not that the Company will realize the benefits of such deferred assets.

As of December 31, 2001, the Company has a research and experimental credit carryforward for California income tax purposes of \$440,884 available to reduce future income taxes. The California research credit carries forward indefinitely until utilized.

(13) SEGMENT INFORMATION

SFAS No. 131, *Disclosure About Segments of an Enterprise and Related Information*, establishes standards for the manner in which public companies report information about operating segments, products, services, geographic areas, and major customers in annual and interim financial statements. The method of determining what information to report is based on the way that management organizes the operating segments within the enterprise for making operating decisions and assessing financial performance.

The CeO reviews financial information presented on a consolidated basis accompanied by disaggregated information about revenue by geographic region for purposes of making operating decisions and assessing financial performance. The consolidated financial information reviewed by the CeO is the same as the information presented in the accompanying consolidated statements of net income. In addition, as the Company's assets are primarily located in its corporate offices in the United States and not allocated to any specific segment, the Company does not produce reports for, or measure the performance of, its segments based on any asset-based metrics. Therefore, the Company operates in a single operating segment, which includes the design, manufacture, and sale of digital test equipment for telecommunications, transmission, cable, and signaling applications.

Revenue information regarding operations in the different geographic regions is as follows (in thousands):

	Years Ended December 31,			
	2001	2000	1999	
Net sales:				
North America (United States and Canada)	\$52,612	\$ 88,469	\$50,168	
Europe/Africa/Middle East	11,189	10,407	4,364	
Asia/Pacific	11,547	10,144	5,742	
Latin America	3,711	4,461	1,191	
	\$79,059	\$113,481	\$61,465	

Revenue information by product category is as follows (in thousands):

	Years Ended December 31,			
	2001	2000	1999	
Wire Line Access	\$48,648	\$ 90,317	\$59,895	
Fiber Optics	15,094	14,236	236	
Cable TV	11,213	4,273	1,334	
Signaling	4,104	4,655		
	<u>\$79,059</u>	\$113,481	<u>\$61,465</u>	

SUNRISE TELECOM INCORPORATED AND SUBSIDIARIES Notes to Consolidated Financial Statements—(Continued)

(14) SUBSEQUENT EVENTS

In February 2002, the Company acquired the CaLan Cable TV test business from Agilent Technologies for approximately \$7.2 million in cash. CaLan products incorporate DigiSweep technology, the industry's fastest, high resolution, digital services-compatible sweep. CaLan products are designed to support a complete range of remote and field maintenance activities, from forward and return path alignment, to signal measurement and ingress troubleshooting.

In February 2002, the Company loaned \$1.05 million to its President and Chief Executive Officer Paul Ker-Chin Chang. The Board of Directors and the Compensation Committee both approved the loan. The note requires Mr. Chang to pay interest each month at an annual percentage rate of 4.0%. Mr. Chang must repay the principal amount no later than February 18, 2005. The loan is secured by 3.0 million shares of the Company's common stock.

(15) QUARTERLY FINANCIAL DATA (UNAUDITED)

	Quarter Ended															
		r. 31, 001		ne 30, 2001		pt. 30, 2001		c. 31, 2001		ar. 31, 2000		ne 30, 2000		pt. 30, 2000		ec. 31, 2000
						(in the	ousa	nds, exc	ept p	per share	dat	a)				
Net sales	\$22	,453	\$2	1,078	\$1	7,952	\$1	7,576	\$1	9,791	\$2	7,485	\$3	5,085	\$3	31,120
Gross profit	15	,449	13,849		12,000		12,252 14,20		4,203	19,503		25,051		21,730		
Income (loss) from																
operations	1,464		(262)		(343)		93		4,334		7,332		10,992		7,791	
Net income	1	,529	29 425		90		773 2,773		4,575		7,325		5,712			
Earnings per share:																
Basic	\$	0.03	\$	0.01	\$	0.00	\$	0.02	\$	0.06	\$	0.10	\$	0.15	\$	0.11
Diluted	\$	0.03	\$	0.01	\$	0.00	\$	0.02	\$	0.06	\$	0.10	\$	0.14	\$	0.11
Shares used in per share																
computation:																
Basic	49	,868	50,147		50,351		50,406		45,060		45,451		49,178		49,761	
Diluted	51	,277	51,582		51,319		51,115		4	7,032	47,638		38 51,855		51,874	

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Part III.

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this Item with respect to our executive officers is incorporated herein by reference from the information under Item 1 of Part I of this Report. Reference is made to the information responsive to Items 401 and 405 of Regulation S-K contained in our definitive Proxy Statement relating to our 2002 Annual Meeting of Shareholders which will be filed with the U.S. Securities and Exchange Commission within 120 days after the close of the Company's fiscal year ended December 31, 2001, pursuant to Rule 14a-6(b) under the Securities and Exchange Act of 1934, as amended; said information is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

Reference is made to the information responsive to Item 402 of Regulation S-K contained in our definitive Proxy Statement relating to our 2002 Annual Meeting of Shareholders which will be filed with the U.S. Securities and Exchange Commission within 120 days after the close of our fiscal year ended December 31, 2001, pursuant to Rule 14a-6(b) under the Securities Exchange Act of 1934, as amended; said information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Reference is made to the information responsive to Item 403 of Regulation S- K contained in our definitive Proxy Statement relating to our 2002 Annual Meeting of Shareholders which will be filed with the U.S. Securities and Exchange Commission within 120 days after the close of our fiscal year ended December 31, 2001, pursuant to Rule 14a-6(b) under the Securities Exchange Act of 1934, as amended; said information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Reference is made to the information responsive to Item 404 of Regulation S-K contained in our definitive Proxy Statement relating to our 2002 Annual Meeting of Shareholders which will be filed with the U.S. Securities and Exchange Commission within 120 days after the close of our fiscal year ended December 31, 2001, pursuant to Rule 14a-6(b) under the Securities Exchange Act of 1934, as amended; said information is incorporated herein by reference.

Part IV.

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

- (a) The following documents are filed as part of this report:
 - (1) Our Consolidated Financial Statements are included in Part II, Item 8:

Independent Auditors' Report

Consolidated Balance Sheets

Consolidated Statements of Net Income

Consolidated Statements of Shareholders' Equity and Comprehensive Income

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

(2) Supplementary Consolidated Financial Statement Schedule as of and for the years ended December 31, 2001, 2000 and 1999:

None.

All other schedules are omitted because of the absence of conditions under which they are required or because the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits:

See attached Exhibit Index.

(b) Reports on Form 8-K

There were no reports on Form 8-K filed during the last quarter of the year ended December 31, 2001.

Signatures

Pursuant to the requirements of the Securities Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Jose, State of California on March 15, 2002.

SUNRISE TELECOM INCORPORATED

Ву:	/s/ Paul Ker-Chin Chang
	Paul Ker-Chin Chang
	President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1934, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	<u>Date</u>
/s/ Paul Ker-Chin Chang Paul Ker-Chin Chang	President and Chief Executive Officer (Principal Executive Officer)	March 15, 2002
/s/ PETER L. EIDELMAN Peter Eidelman	Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2002
/s/ Paul A. Marshall Paul A. Marshall	Director	March 15, 2002
/s/ ROBERT C. PFEIFFER Robert C. Pfeiffer	Director	March 15, 2002
/s/ PATRICK PENG-KOON ANG Patrick Peng-Koon Ang	Director	March 15, 2002
/s/ HENRY P. HUFF Henry P. Huff	Director	March 15, 2002
/s/ JENNIFER J. WALT Jennifer J. Walt	Director	March 15, 2002

Exhibit Index

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Form 10-K:

Exhibit Number	Description
2.1	Asset Purchase Agreement dated January 23, 2002 among between Agilent Technologies, Inc. and Sunrise Telecom Incorporated and Amendment #1 to Asset Purchase Agreement dated February 28, 2002.
3.1	Amended and Restated Certificate of Incorporation (Incorporated by reference from Exhibit 3.1 to Sunrise's Report on Form 10-K dated March 16, 2001).
3.2	Amended and Restated Bylaws (Incorporated by reference from Exhibit 3.2 to Sunrise's Report on Form 10-K dated March 16, 2001).
4.1	Specimen Stock Certificate (Incorporated by reference from Exhibit 4.1 to Registration Statement No. 333-32070).
10.1	Lease Agreement dated June 22, 1999 between Sunrise and Great Oaks Properties (Incorporated by reference from Exhibit 10.1 to Registration Statement No. 333-32070).
10.1.1	Amendment to the Lease Agreement dated November 20, 2001 between Sunrise and Great Oaks Properties.
10.2	Purchase and Sale Agreement and Escrow Instructions dated November 5, 1999 between Sunrise and Enzo Drive, LLC (Incorporated by reference from Exhibit 10.2 to Registration Statement No. 333-32070).
10.3	Loan Agreement dated April 21, 2000 between Sunrise and Bank of America (Incorporated by reference from Exhibit 10.3 to Registration Statement No. 333-32070).
10.3.1	Amendment #2 to the Loan Agreement dated August 1, 2001 between Sunrise and Bank of America (Incorporated by reference from Exhibit 10.3.1 to Sunrise's Report on Form 10-Q dated August 10, 2001).
10.3.2	Amendment #3 to the Loan Agreement dated November 30, 2001 between Sunrise and Bank of America.
10.4	Stock Purchase Agreement dated July 30, 1999 between Sunrise, Hukk Engineering, Inc., Clifford D. Brown, Robert L. Richards and James A. Barker (Incorporated by reference from Exhibit 10.4 to Registration Statement No. 333-32070).
10.5	Master Agreement dated February 22, 2000 between Sunrise and Franco Messori, Franco Corradini, Angelo Baccarani and Lucia Barbara Silvani and Master Agreement dated February 22, 2000 between Sunrise and Giuliano Sala, Gian Piero Brandolini, Pietro Zucchini, Aldo Baccarani and Franco Montanari (Incorporated by reference from Exhibit 10.5 to Registration Statement No. 333-32070).
10.6	Share Purchase Agreement dated January 8, 2001 among each of the shareholders of Avantron Technologies Inc. and Sunrise Telecom Avantron Division Corp., a Nova Scotia unlimited liability company and wholly-owned subsidiary of Sunrise (Incorporated by reference from Exhibit 2.1 to Sunrise's Report on Form 8-K dated February 1, 2001).
10.7	Form of Indemnification Agreement between Sunrise and each of its Officers and Directors (Incorporated by reference from Exhibit 10.6 to Registration Statement No. 333-32070).†
10.8	2000 Stock Option Plan (Incorporated by reference from Exhibit 10.7 to Registration Statement No. 333-32070).†
10.9	2000 Employee Stock Purchase Plan (Incorporated by reference from Exhibit 10.8 to Registration Statement No. 333-32070).†
10.10	2002 Executive Officer Bonus Plan.*†
10.11	Employee Agreement dated January 8, 2001 between Avantron Technologies, Inc. and Raffaele Gerbasi and Amendment #1 dated March 12, 2002.†
21.1	List of Subsidiaries.
23.1	Consent of KPMG LLP.

- * Material has been omitted pursuant to a request for confidential treatment.
- † Indicates management contract or compensatory plan, contract or arrangement.

Directors

Paul Ker-Chin Chang

Chief Executive Officer, President, and Chairman of the Board

Paul A. Marshall

Chief Operating Officer, Vice President of Marketing and Director

Patrick Peng-Koon Ang

Director

Henry P. Huff

Director

Robert C. Pfeiffer

Director

Jennifer J. Walt

Director

Officers

Paul Ker-Chin Chang

Chief Executive Officer, President, and Chairman of the Board

Paul A. Marshall

Chief Operating Officer, Vice President of Marketing and Director

Peter L. Eidelman

Chief Financial Officer and Treasurer

Jeong E. Joo

Chief Technology Officer

Charlie Yong Huang

Vice President of Engineering

Raffaele Gerbasi

Vice President and General Manager of Cable Broadband Group

Robert H. King

Vice President of North American Sales

Raymond L. Chong

Vice President of Product Marketing

Dennis K. Koo

Vice President of the Quality Group

Michael F. Heafey

General Counsel and Secretary

Administrative Management

Scott E. Green

Assistant Controller

Keith D. Laton

Director of Tax and Treasury

Corporate Headquarters

Sunrise Telecom Incorporated 302 Enzo Drive San Jose, CA 95138 (408) 363-8000 www.sunrisetelecom.com

Annual Meeting

The Annual Meeting of the Stockholders of Sunrise Telecom Incorporated will be held at 10:00 A.M. on May 8, 2002 at Sunrise Telecom Corporate Headquarters, 302 Enzo Drive, San Jose, CA 95138

Form 10-K

The Company files an annual report with the Securities and Exchange Commission on Form 10-K, pursuant to the Securities and Exchange Act of 1934. Stockholders may obtain a copy of this report without cost by writing to Investor Relations, 302 Enzo Drive, San Jose, CA 95138.

Transfer Agent

Computershare Trust Co. Inc. 350 Indiana Street Suite 800 Golden, CO 80401 (303) 262-0600

Legal Counsel

Orrick, Herrington & Sutcliffe LLP 400 Sansome Street San Francisco, CA 94111 (415) 392-1122

Independent Accountants

KPMG LLP 500 East Middlefield Road Mountain View, CA 94043 (650) 404-5000

Common Stock

Sunrise Telecom Incorporated's common stock is traded on the NASDAQ exchange under the symbol "SRTI".

